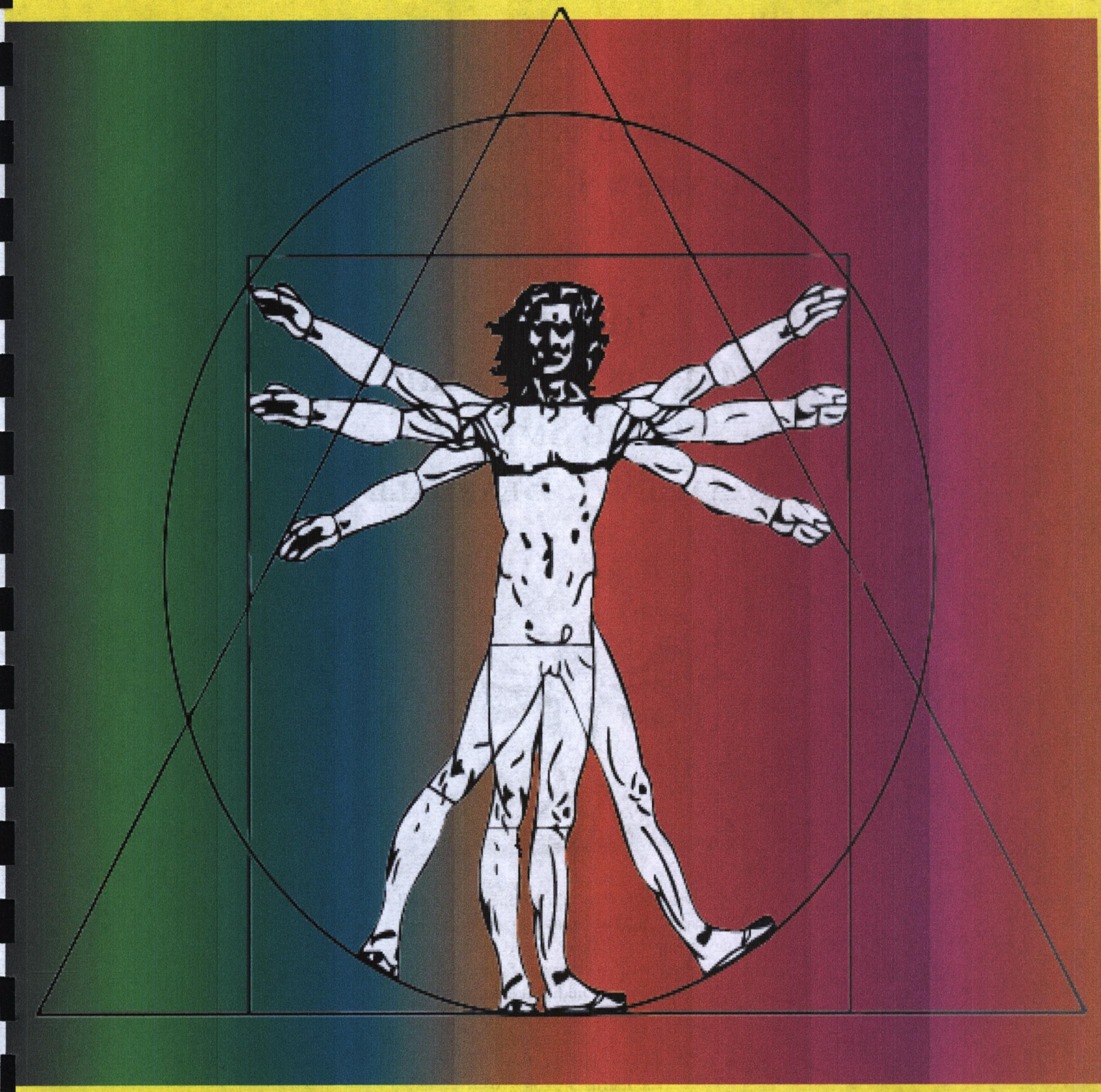
Clinical Kinesiology

Instruction Manual



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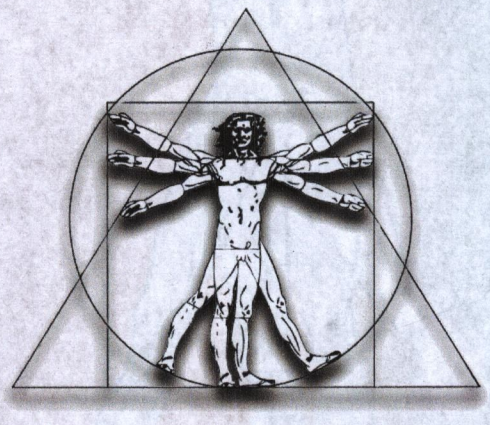

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DEDICATION

by the late Dr. Alan Beardall

To those Doctors and other healing professionals whose desire is to serve their patients.

INTRODUCTION

The Instruction Manual of Clinical Kinesiology has a dual function:

1. To introduce the practitioners of the healing profession to the detail and complexities of the Clinical Kinesiology workshop manuals.

2. To introduce the new and revolutionary hand modes.

Applied Kinesiology, an evolving aspect of the practice of Chiropractic, has been expanding and increasing in complexity since 1964 when Dr. George Goodheart, a Detroit chiropractor, discovered that muscles are dynamic tools that can provide a method of detecting aberrant body functions and are intimately related to structural dysfunction.

Clinical Kinesiology is the name I have chosen for this publication. This has been done to preserve the trademark and the originality of Dr. Goodheart's work, Clinical Kinesiology is at present not considered part of the accepted procedures adapted by the official organization of Applied Kinesiology, the International College of Applied Kinesiology (I.C.A.K.). Clinical Kinesiology is an outgrowth of my personal practice proven to be consistent and practical over a period of time within an Applied Kinesiological practice.

This Instruction Manual is not intended to replace any of the present Applied Kinesiology manuals. In fact, many of the concepts are an expansion of the knowledge gained from the authors listed below. Their works are a prerequisite to this work. The Instruction Manual will introduce five areas of significant contribution:

1. Bio-computer concepts.
2. An expansion of Dr. Hans Selye's concepts on the General Adaptive Syndrome.
3. Various clearing techniques.
4. Introduction to the new organic or bio-technological non-evasive diagnostic techniques of computer language.
5. Additional factors that affect muscles on a local computer basis.

Goodheart, George, D.C. *Applied Kinesiology, Workshop Procedural Manuals*, 542 Michigan Building Detroit, Michigan 48226

Walther, David, D.C. *Applied Kinesiology, The Advanced Approach to Chiropractic Systems* D.C., 275 W. Abriendo, Pueblo, Colorado 81004

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Chapter I

The History of CK

Historical Perspective

Definition of Applied Kinesiology

Kinesiology in common medical usage is "the study of muscles and muscular movement." However, when coupled with the word applied, a whole new concept is envoked: the use of muscle testing to evaluate body function. That is, by manually testing various muscles, areas of dysfunction can be diagnosed. These areas can then be tested in relationship to therapeutic reflex points and acupuncture points to identify causal factors. Disease begins as an imbalance in the body on an energetic level. Weakness in a muscle is an energetic phenomenon which can be used to identify health problems before symptoms appear.

Historical Development of Applied Kinesiology

Historically muscle testing was used to evaluate function, range of motion, and strength of muscles, in an attempt to rehabilitate conditions resulting from trauma and wasting diseases. Once muscle function was determined, physical therapy was the preferred treatment. In the field of chiropractic, these concepts were changed in a very innovative way by Dr. George Goodheart, the founder of applied kinesiology. In the early 1960's, Dr. Goodheart proposed a radically different idea for the cause of posture abnormalities. The prevalent view of the time, was that a tight, painful, muscle in spasm, was pulling the bones out of proper alignment. Goodheart said that in actuality, it was the weak muscles opposing the muscles in spasm that allow the tight ones to displace the bones. One way to conceptualize this idea is to visualize a swinging door held in place by two springs that allow it to swing in either direction. If one of the springs becomes weak for some reason, then the opposite spring, even though still of normal strength, will knot up in an attempt to eliminate the extra slack. No matter what is done to the knotted spring, the problem will not be permanently fixed; not until the weak spring is repaired or replaced. The beginnings of applied kinesiology were tied to attempting to correct postural abnormalities resulting from weakness of specific muscles or muscle groups. Thus a person's posture is analyzed, thereby revealing suspected weakness of certain muscles. These muscle weaknesses are then verified by muscle testing, physical therapy is applied and the posture hopefully corrected. The word, hopefully, is indicative of the fact that far too many times the posture does not normalize entirely, or the improved posture lasts only temporarily.

Five Factors

In order to effect relatively permanent corrections, Dr. Goodheart continued his research and found many therapeutic techniques that could affect muscle strength. He eventually identified "five factors" into which these techniques could be grouped. These five factors are the nervous system, the cerebrospinal fluid system, the lymphatic system, the vascular system, and the acupuncture meridian system.

Neurolymphatic Reflexes

A great deal ofresearch took place in parallel with the developing of applied kinesiology by George Goodheart. An osteopathic physician named Frank Chapman did extensive research on the lymphatic system during the 1930's. Chapman discovered a series of reflex points, on the anterior and posterior aspects of the torso, usually in the intercostal spaces and along the spine, which he correlated with specific glands and organs, as well as specific diseases. Stimulation of these reflexes wi th a deep, rotary massage increases the lymphatic drainage from the associated organs, thereby promoting a healthier interstitial cellular environment. George Goodheart was able to integrate these concepts into applied kinesiology in 1965 when he correlated specific Chapman neuroiymphatic reflexes to specific muscles, noting that a weak muscle could be strengthened by massaging its corresponding reflex. Since these reflexes were already associated with specific organs, Goodheart then developed the relationship of organs to muscles.

Neurovascular Reflexes

Another area of development in the early 1930's was the neurovascular reflexes discovered by Dr. Terence Bennett. These reflexes influence the supply of blood to various organs when they are lightly held. Most of these reflexes are located on the head and on the anterior trunk.

Goodheart, in the 1960's, again capitalizing on techniques in other fields, noted that specific neurovascular reflex activation would strengthen specific weak muscles. He performed extensive research using biofeedback and thermocouple instrumentation to identify exact areas on the skin where temperature changes could be measured as a result of holding the Bennett reflexes. As in the case of neurolymphatic reflexes, Goodheart concluded that specific muscles were related to specific organs.

Meridians

Up to this point, applied kinesiology had been making large strides integrating various western developed techniques within the boundaries of its previously very limiting concepts of posture analysis, muscle testing and physical therapy. Again, in a sweeping expansion of the kinesiological horizons, Goodheart took the over three thousand year old acupuncture meridian/organ relationships and combined them with his researched muscle/ organ relationships to produce a correspondence of muscles to meridians. The meridians are a system of channels interconnecting all organs, glands, in fact, all tissues of the body. These channels carry both qi, commonly known as life force or energy, and blood to nourish all body parts both chemically and energetically.

This system of pathways, as complex as the venous/ arterial system familiar to Western medicine, consists of twelve main channels, associated with the primary organ they energize; twelve divergent channels branching off the main channels to provide nourishment to other tissues; fifteen collateral channels providing connections between pathways; eight extra channels providing an energy storage function to back up the primary meridians; innumerable branches to all areas of the body. Acupuncture points along the rp.ain meridians provide a means of testing proper meridian function and of affecting the energy flowing on the channel. Since the twelve main meridians correspond to the ten major organs and two major functions (lung, large intestine,stomach, spleen, heart, small intestine, bladder, kidney, circulation/sex, triple warmer, gall bladder, and liver), the ability to balance the energy on a meridian, by stimulation or sedation of its appropriate points, provides a means of re-establishing the energetic homeostasis of their associated organs.

Triad of Health

The next major step in the development of applied kinesiology came as a result of clinical observations that muscles are weakened for many different reasons. The causes of muscle strength change were divided into three major categories. The first category, structural imbalances, can result from such things as skeletal misalignments and uneven muscular development from one's exercise or employment. The second category, chemical imbalances, can be split into nutritional deficiencies, (of vitamins, minerals, hormones, enzymes,
etc.), toxic conditions in the body, and allergies to food and environmental conditions. The third category, mental imbalance, can develop from emotional trauma and negative thought patterns. Thus, the concept of the "triad of health" was developed, and depicted as an equilateral triangle with one of the labels, structure, chemical or mental, on each of the sides of the triangle. It very quickly became obvious that anyone side of the triad could affect either or both of the other two. For example, a chemical imbalance could affect the proper function

of an organ, which in turn could cause a blockage in the associated meridian, which might then weaken a muscle, or create a hypertonic muscle, thereby precipitating a structural or postural alteration resulting in the actual condition of the complaint. The structural problem could be treated using the five factors described above, but this approach would only attack the symptoms, and unless the originating chemical cause was detected and corrected, the structural problem would keep recurring.

Therapy Localization

Even though applied kinesiology had apparently unified structure, chemical/nutrition, and mental/emotional aspects of health, along with several western and eastern therapeutic methodologies, there still remained several problems to resolve. First, how to determine what to treat as the priority cause, rather than treat all three sides of the triad with all five therapeutic factors each time; second, how to treat problems with no known muscle association. At this point, Goodheart discovered a procedure called therapy localization - probably the major contribution of applied kinesiology to accurate diagnostic procedures. This procedure is to simply touch the body and test a strong muscle. If it weakens, then the area of contact is a problem area. Nearly all pathologies or traumas will exhibit this phenomenon. However, therapy localization will only tell the location of a problem, not what the problem is. This same technique can then be used to determine which of the five therapeutic factors to use for treatment of a given problem. While having the patient therapy localize the problem and using the resulting weak muscle, touch each of the five factors in turn. The ones that strengthen the weak muscle are the involved ones and can be treated.

Problems in Applied Kinesiology

Applied Kinesiology encompasses hundreds of very effective techniques - all of which achieve extraordinary results when performed at the right time and the right place. The problem is how to determine when any given technique should be used. Clinical Kinesiology (CK) was born out of the frustration of not knowing what the patient's body wants to have worked on and which technique would be the most appropriate. By developing a dialogue with the body, CK lets the patient's body establish what the primary imbalance is. CK then lets the body reveal the adaptive patterns it developed to compensate for this imbalance, allowing it to accumulate all the related stored information, evaluate it and then display the underlying cause. This CK/body dialogue will then disclose which therapeutic will be most effective in resolving the underlying problem.

Introduction To The Biocomputer

Introduction

Clinical observations led Dr. Alan Beardall to conclude that the human being functions as a very extensive biocomputer. The Biocomputer Model of the human body has as its underlying premise that at the most fundamental level the body operates on a day-to-day basis on the same basic principles as the electronic computer - it is binary in nature and operates according to the instructions of a program whose function is survival. The basic operation of an electronic computer is to accept data from the operator, perform operations on that data per the instructions of its controlling program, and to report the results to the operator. Similarly, the basic function of the Biocomputer is to accept input data from all the systems and senses of the body, perform operations on that data per the instructions of its controlling program - that is to evaluate all data for its impact on the survival of the organism and to develop the necessary strategy to optimize its ability to survive and finally to report the results to the various systems of the body so the necessary actions can be implemented. However, it is patently obvious that a human being is not really like an electronic computer. A person is alive, guided by his innate intelligence - his divine spark of spirit. The body is infinitely more complicated - more sophisticated - than a computer could ever be. It does not just confine itself to the directions of a program, but continuously changes, adapting to the ever shifting stimuli from its environment.

So why the concept of the Biocomputer model? Since the body functions do have some similarities to an electronic computer, we can use our understanding of an electronic computer to derive insights into how the body responds in certain situations. As the analogy becomes more complete, based on clinical findings, the ability to predict body reactions to environmental changes, or therapies applied, becomes more accurate. The Biocomputer model essentially provides a method to learn the body's language and to develop a dialogue that allows accurate diagnosis of causal factors and accurate prediction of body response to applied therapies.

Since comprehending this concept is vital for the proper understanding and performance of the Clinical Kinesiology system, a review of the operating principles of the electronic computer is essential.

Basic Components & Functions

Central Processing Unit (CPU) Control Unit

The electronic computer basically consists of electrical components called chips that operate according to the mathematical system of logic. That is, chips have only two states, either on or off, and therefore only deal with pure information, mathematical calculations and questions that can be answered by a yes or no. This is called a binary system two states, either on or off'. All operations within a chip are done in terms of "bits" of information. A bit is like a light switch - it can be on, in which case there are five volts present - or it can be off, in which case there are zero volts present. In common terminology, a bit represents one letter or a number that is one integer long. Any given chip may have thousands of these bits and there are many chips in a computer. The heart of the electronic computer is the Central Processing Unit, more commonly known as the CPU. It controls every operation of the computer from the gathering ofinformation from outside sources to reading or writing this information to memory, to having the logic unit perform calculations on the information, to storing the results in memory or sending it out to be used by humans. However, the CPU only knows what to do by the instructions given to it by a person by way of a program he has written and loaded into the computer. This program is a step-bystep list of instructions for the CPU to execute.

This is very fine indeed as long as everything functions properly. The CPU performs millions of calculations and functions per second. To keep things in proper order and avoid chaos, every component must operate at a compatible speed and also at the correct time. Therefore, there is a timing chip that sends out timing pulses that control each component's function. If the timing chip or the CPU or any of

the other chips malfunction, then everything goes haywire: either the computer "crashes" and functions inappropriately giving incorrect answers, or it freezes up and stops functioning entirely.

Memory & Storage Devices

In order for a computer to operate properly it must have some place to put all the information it needs to tell it what to do (the program), as well as all the data it is doing it to, and the results of the doing. This place consists of the memory chips which correspond to your desk top in your office. During the day the work you are doing is hopefully placed in an orderly fashion on your desk and when you're done it is placed in its folder and stored in your desk drawer or file cabinet. The computer loads the program and the data it needs into memory chips for temporary storage while it works. It is temporary because when the computer is turned off everything in the memory chips is erased. Therefore, once your work is done, the results must be stored onto the permanent memory media like floppy disks.

Input Units

Many times the computer needs information from the person operating it. This is accomplished by several different mechanisms. The most common is the keyboard which is just like a typewriter and allows the operator to type in words or numbers as required. In addition, there are mice, joysticks, digitizing tablets, modems for transferring data via telephone lines and even voice input devices.

Output Units

In order for the work the computer performs to be useful it must be able to present the results to the operator in some fashion. This is done by way of a TV-like piece of equipment called a monitor or screen, as well as by printers for a more permanent "hardcopy" or print out; output units also display error messages when something goes wrong and the computer cannot function properly.

Software Programs

In order for the computer to do anything useful, it must be told exactly what to do, what to do it to, and what to do with the results. This is accomplished by step by step instructions called a program. The computer always does exactly what it is told to do unless something malfunctions.

Basic Operation

So, how does a computer work? When power is first turned on the "built-in test" or "BIT" test is automatically executed to check out the basic operation of the computer, its interfaces and its memory. This Bit test is a permanent program that is kept in some special chips that do not lose their memory when power is turned off ... this means that the stored program cannot be changed. Next the system software is loaded. This program is the interface between the CPU and the input and output devices as well as the application programs that are being to run. The system software basically translates all inputs and commands into the language that the computer understands and can execute. Finally the application program that the operator wants to run is loaded and the CPU executes each step in sequence and outputs the results as directed by the program.

Networking

When many computers need to work together, they do so by networking. This requires special networking software and hardware and one of the computers must function as a file server, which means that it stores all the data and programs that are to be used in common among all the connected computers. The file server controls which computers have access to what programs and when each one can access the files so that one computer cannot interfere with another one if they are both working on the same problem.

Basic Components & Functions

The biological computer, commonly known as the Biocomputer, functions as a binary computer, either on or off, either positive or negative polarity, either strong or weak, etc. The Biocomputer consists of five main computers which are organized on a hierarchical basis depending on the computer's functions - Master

computer, Primary computer, Endocrine computer, Spinal computer, and Local computer. Each computer has a control unit or CPU, memory/storage units, input units, output units, terminals, processing points, and access points. These relationships are summarized

in the "Summary of Biocomputer Relationships" chart at the end of this section.

CENTRAL PROCESSING UNIT (CPU)

Each minicomputer has its own control unit. For example, the cerebrum is the CPU of the Primary computer or brain. The cerebellum is the CPU of the Endocrine computer. The spine is the CPU of the Spinal computer, and the nerve synapse is the CPU of the Local computer. The control unit regulates the flow of data between the logic unit, storage units, the input units, the output units, and between the minicomputers themselves. It contains the program which continually operates for the survival of the body.

Just as with the electronic computer, timing is of the utmost importance. When the timing is off, i.e., the nerve synapse is too slow or fast, or, a nerve is pinched and does not respond properly, then the CPU gets incorrect information and that part of the body gets out of sync with everyone else and does not function properly. If this continues long enough, breakdown or disease occurs. Similarly, just as the electronic computer can have failures - chips can fail causing erratic function or no function, dust can get on a floppy disk and prevent data from being accessed, the cooling fan may malfunction or a fuse may blow causing the shutdown of the computer - so too can the Biological Computer.

There are a myriad of possibilities:
1) appropriate nutritional nutrients are not present,
2) acupuncture meridian energies are out of balance,
3) nerve transmission is reduced or impeded,
4) vertebrae or other structures are out of place,
5) emotional blockages exist,
6) etc., the list is endless.

MEMORY & STORAGE DEVICES

Storage devices in the Primary computer consist of short term memory for the ongoing data processing, and, long term memory for more permanent storage requirements. In the other computers the storage units are tissue and cellular memory.

INPUT UNITS

The input units for the Biocomputer consist of all sensory receptors for data coming from the environment. Internally, input comes from sensory receptors as well as the nervous system, circulation system, etc., in the form of electrical as well as chemical data. The various sensory receptors include eyes, ears, nose, taste sensors on the tongue, feeling sensors in the skin, pain sensors, etc. The input units are very widespread, acting both as homeostatic loops for the biocomputer's operation, as well as detecting operator error, i.e., lifestyle problems. This input data or sensory data is translated into binary nerve impulses which are relayed to synapses in the spinal cord - the Spinal minicomputer. These impulses can then be ignored, can initiate a correction strategy at this level only, or can be sent to another minicomputer level for processing. This sensory data can be placed in storage or memory along with the reactive strategy taken so it is more easily available in the future.

OUTPUT UNITS

The output units ofthe Biocomputer consist of muscles and the skin by way of the peripheral nervous system. These output units are basically binary in nature: the muscles are either strong or weak, and, the skin either displays a positive therapy localization or it doesn't (therapy localization is explained in detail in a later section). Like the electronic counterpart, when there are problems in the biocomputer the output units display error messages - pain, or hot or cold areas on the skin, or aberrant function such as weak muscles or switching phenomenon, etc.

Software Programs

Like the electronic computer, the Biocomputer has an application program that it is continually executing

- the program to survive. This program consists of all the subprograms that tell each cell of the body what its function is. This is the program that is the genetic code and is the overall controlling software of the Biocomputer.

Networking

Networking is obviously required in the Biocomputer. There are five major minicomputers in the body: the Master Computer, the Primary Computer, the Endocrine Computer, the Spinal Computer and the Local Computer.

The Master Computer is the file server for the other four computers. Tongue position #5 is the output unit of the Master Computer.
The Primary Computer is the cerebrum. The skin is the output unit of the Primary Computer.
The Endocrine Computer is the Autonomic Nervous System and its output unit is ann length.
The Spinal Computer is the Spinal Cord and its output unit is leg length.
The Local Computer is the kinetic system and reflex arc. Its output unit is muscle tone.
In reality, every cell is a minicomputer with a program in memory, the DNA; with input units, nutrients, nerves, chi etc.; with output units, lymphatic system, circulation system, and nervous system.
Each cell computer is networked into the computer that it functions with. Each computer up the line in complexity has more and more capability to make decisions and plan strategies for survival.

Basic Operation

As can well be imagined, the Biocomputer is infinitely more complex than an electronic computer. However, the essential principles of operation are similar.
Unlike the electronic computer, the Biocomputer is always working, always monitoring body status and making decisions on strategies for dealing with the day-to-day stresses the body is exposed to. Its primary directive is to survive. It will do whatever is necessary to keep the
body alive - from using nutrients that are available to creating alternative metabolic strategies, to changing polarities, muscle tone, shifting bones, even sacrificing lower priority organs or functions to keep more important systems functioning. It has the unique capability to learn from its experience and change its programming to better enable it to accomplish its fundamental goal - survival.

The minicomputers work together in a hierarchical network system with the Master Computer regulating each minicomputer's access to programs and data thus optimizing the whole body's efficiency. The sensory data entering the Master Computer is compared with previous data, evaluated and then acted upon. This infonnation is sent to the appropriate minicomputers and to the display units.

Monitoring Status of the Minicomputers General Principles

The hierarchical arrangement of the minicomputers from the least to the most complex is from local to spinal to endocrine to primary to master computer. Each computer has a terminal or area of display where its function can be moni tored. It also has a processing point, which when tapped, commands the computer to reexamine its available data, and access points where diagnostic information can be obtained.

The Master Computer

The Master Computer networks and controls the other four computers. Its terminal is the umbilicus. Its integrity can be challenged by directional tugs of the umbilicus.

The Primary Computer

The Primary Computer (Cerebellum) receives, compares, evaluates, integrates and stores data. It performs higher functions of the brain. Its terminal for displaying the proper function of the computer is the eye and the eye muscles. Integrity of the Primary Computer can be challenged via eye positions as well as the skin approximation test, better known as the "pinch test."

The Endocrine Computer

The Endocrine Computer is the autonomic nervous

system which monitors the endocrine system and integrates
most automatic functions. Its terminal is the TMJ and the TMJ muscles are the display. integrity of the Endocrine computer can be challenged via TMJ position as well as arm length evaluation.

The Spinal Computer
The Spinal Computer is the spinal cord which controls communication and integration of information as well as the digestive tract. Its terminal is the hyoid bone, the body's gyroscope. Integrity of the Spinal Computer can be challenged via hyoid position as well as leg length evaluation.

The Local Computer
The Local Computer is the kinetic system and reflex arc. Its terminal is KI-27 at the junction of the first rib, clavicle and the sternum. Integrity of the Local Computer can be challenged via head position and the sternocleidomastoid muscles.

Minicomputer Malfunction
Any of these minicomputers can have an "overload" situation which "blows a fuse" at its terminal. This causes their particular muscles to store information about the adaptation that the Biocomputer makes to the stress at that particular time. This can eventually cause inhibition of information to a higher level (a more complex computer), or the infonnation is put on hold at that computer level until over stressing information can be processed properly. One of the most efficient therapy for correcting minicomputer malfunction is that which opens up the channels between the minicomputers and restores communication, thus removing the adaptation information from their terminals and unblocking the system. This allows information to be processed in structure. chemistry or electromagnetic therapeutic files so the body can treat its causal imbalances rather than the effects of disease or injury.

The integrity of all the body's computers is evaluated by looking for Phase I clarity - five sector group muscle test for Local Computer, leg length for Spinal Computer, arm length for Endocrine Computer, pinch test for Primary Computer. When the body is clear in Phase I, the minicomputers are communicating properly. If this clarity is challenged relative to a displaying therapy localization (TL), or a primary point of reference (PPOR), by percussion of the PPOR, eyes open/closed, inspiration, and expiration.

When the minicomputers are all processing information properly and have no blocks inhibiting the processing of the TL, then there is no adaptation stored in the minicomputer terminals that interferes with the efficient clearing ofthe TL.

For example, if there is a problem with a specific organ, the muscles (Local Computers) associated with that organ should display weakness. If the strategy of the biocomputer to handle this problem is not successful because all the necessary elements for healing are not available, it is forced to adapt and to spread the load to other organs (and their muscles) and eventually to other computers and their terminals. If the adaptation is successful, the muscles for the original problem organ will no longer display, but the newly involved organ muscle will. If the adaptation is not successful then the display of muscle/organ malfunction spreads.

CHAPTER II

THE LIVING COMPUTER

"The tabernacle that houses our spiritual essence is enveloped in our physical body which acts as a transmitter of external stimuli to bring the soul in touch with the physical body and the external environment. Through our sensory system, we become aware of the raw data that is around us."

by the late Alan G. Beardall, D.C.

The Electronic Computer

Our clinical observations at this time lead us to conclude that the body is a biological computer which has an extensive nervous system with processing capabilities similar to that of an electronic computer. To increase our understanding of this biological computer, let us first consider basic computer functions and terminology.

A computer can be defined as an "electronic machine for the purpose of high speed performance of logical operations for the processing of large masses of coded information." In simpler terms it is "a device that accepts information, processes it and produces meaningful results. The computer has three basic functions; they are: input, central processing and output.

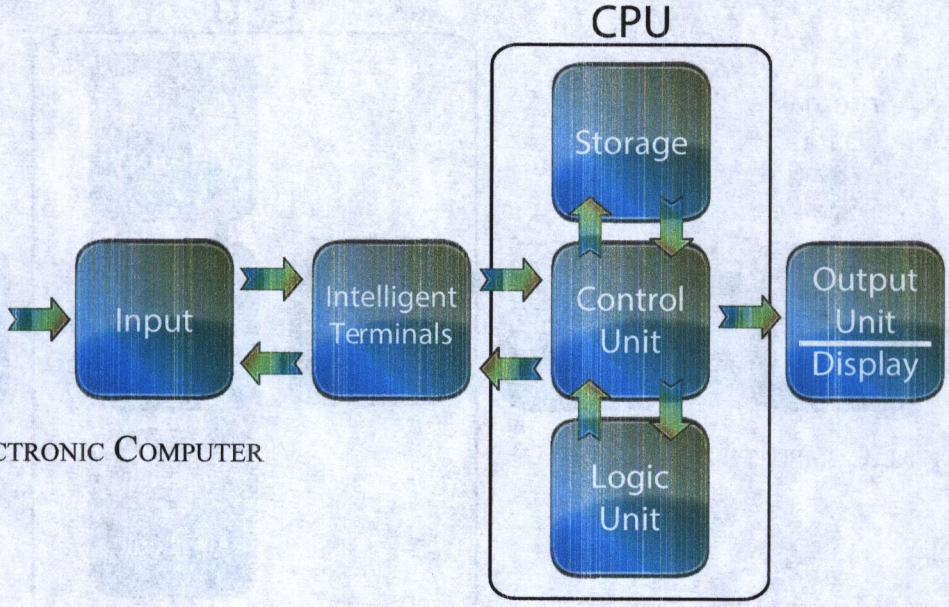
The input unit is the sensory system of the computer- it gathers raw data and breaks it down into small parts that can be handled simultaneously one item at a time.

The computer contains many intelligent terminals which detect and correct certain operator errors as well as capture and enter raw data. All data must be accurate and properly timed. Aberrant information results in the "garbage in, garbage out" phenomenon.

Information is next sent to the central processing unit (CPU) where all data is coordinated and controlled. Here raw data is transformed into common codes so that the computer can determine whether it recognizes the information received.

Central processing is divided into three parts: The arithmetic or logic unit, the storage unit and the control unit. The arithmetic unit performs logical operations such as the comparison of two items of data. The storage unit stores the data while it is being processed.

Whatever is passed on to storage is received in abstract symbolic terms and stored as general facts about the state of the environment. The capability of a computer to "remember" is one of its most essential aspects as it cannot function unless it can store instructions, facts and figures for retrieval when needed. Stored data remains there until it is called upon by the control unit. The control unit is the most vital for it directs overall functioning of the other units and controls the data flow between them. This unit contains the programmed instructions which must be written in the language of the computer. The central processing unit has a hierarchical arrangement with each level having a number of relatively independent processing elements each pursuing its own job and each trading information with levels above, below or laterally and with each other. Different aspects of problems are handled in different portions of functional sub-systems and are represented potentially at all major

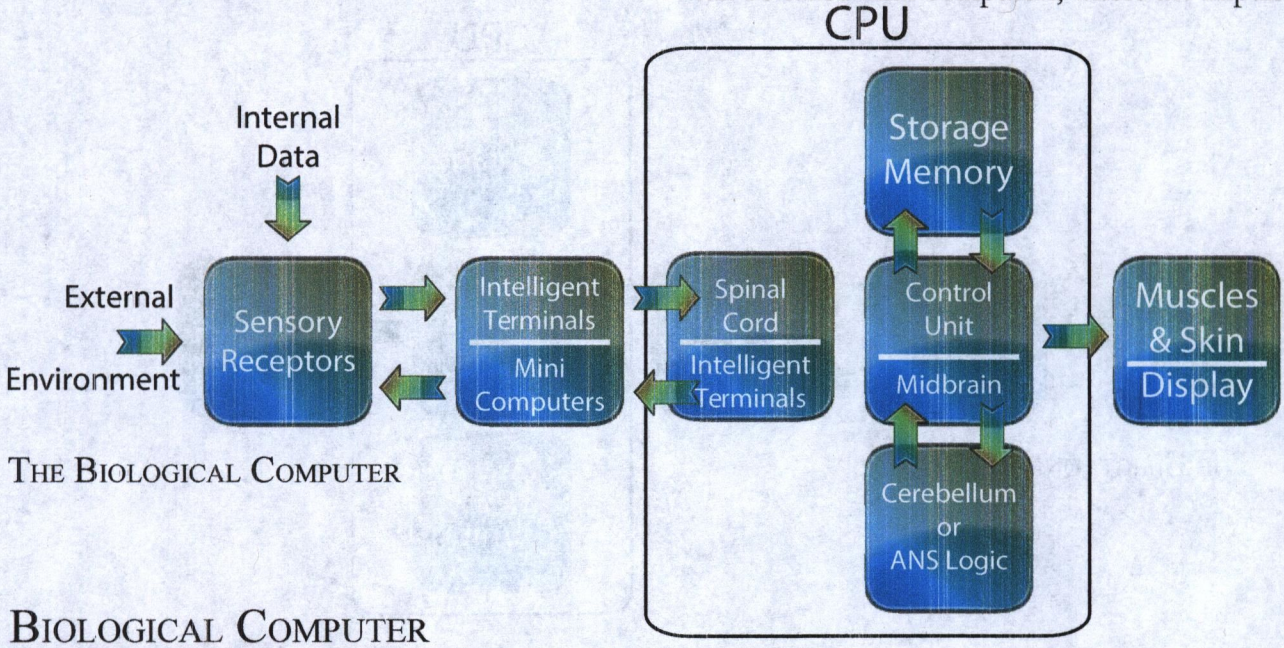


The Electronic Computer

levels of the physical system.

The output unit reports on information from storage and transmits the strategies to the display unit. This unit then reflects the desired actions and computations of the CPU.

In summary, a computer is involved in manipulation of large amounts of sensory data which is processed for input error, monitored, coordinated, controlled, compared, integrated, evaluated and reacted upon to produce adequate solutions to complex problems.



THE BIOLOGICAL COMPUTER

THE BIOLOGICAL COMPUTER

With our understanding of the electronic computer, let us now compare these qualities with the biological computer.

The human body is a complex combination of different types of organs and tissues. These tissues are involved in a series of interactions both with external and internal stimuli (raw data). This raw data is interfaced with and if necessary reacted upon. These reactions must reflect the "desired action" or will of the primary tissue involved with the problem. The reaction may result in modified behavior or motion, thus the statement "body language never lies."

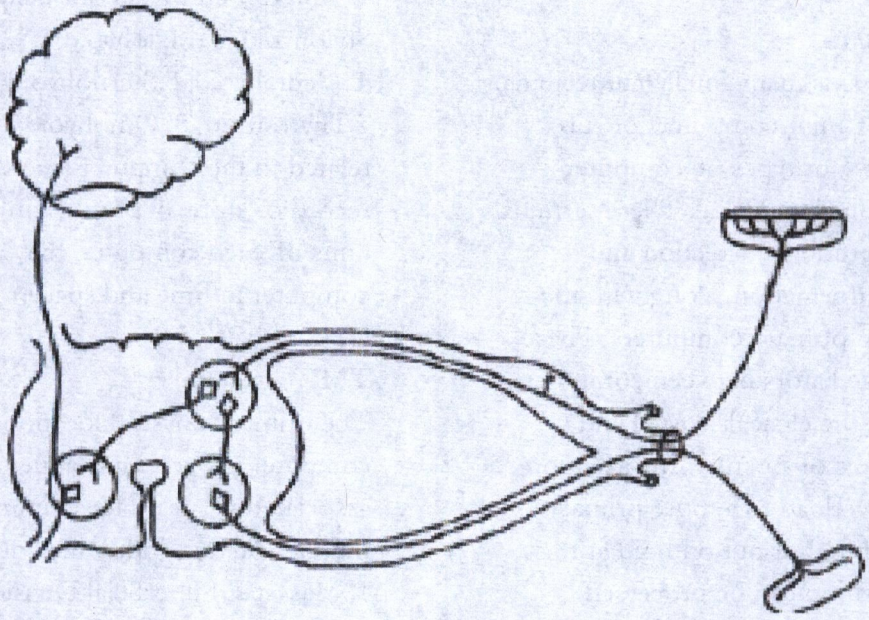
The human body acts similar to a computer in that it has the same basic functions: input, central processing and output. The following discussion attempts to correlate these functions into a meaningful relationship.

Our input unit would be our sensory collection system via the eyes, ears, nose, taste, touch and also includes many other receptors within our bodies that collect internal data. Adequate irritation of these receptors is called the stimulus (sensory data) and must be reduced to neurological impulses so that the actual physical event can be translated and presented to the nervous system. These impulses are acted upon by intelligent terminals (synapses), and what can be called mini-computers, where the impulses are detected, corrected, acted upon or entered for processing at other levels of functioning. In essence, information collected by the sensory system must be directed to the proper areas for adequate processing and integration. Numerous intelligent terminals perform many important functions and simple actions are processed entirely at the level of the spinal cord from input to output, i.e. reflex arc. The brain may receive impulses from a simple reflex arc and may cause other systemic reactions (evaluation), i.e. eyes focus on an object, head turns toward the object, etc. The body then places all this information in storage for future reference. What was once a simple impulse can become a systemic reaction that may have many sites of storage or memory. (See diag. Reflex Arc).

The CPU is made up of the nervous system and its

divisions: A. Peripheral nerves, B. Spinal cord, C. Midbrain, D. Cerebellum and Cerebral tissues.

Once information that was sensory data is reduced to impulses traveling along the nerve, they are acknowledged, integrated, regrouped and prepared for evaluation and storage. "The specific area for storage or memory has not been located, however evidence suggests that it is incorporated into the structure wherever the stored information is to act." This would lead us to believe that memory is



distributed throughout the body.

Complex data must be reduced to decisions in order to monitor heart rate, temperature, blood and tissue pH, nutritional needs, oxidation rates, thyroid function, muscle tone, spinal positioning and protection of injured or diseased tissue and organs, etc.

The output or display function concerns itself with presenting the processed information of the CPU in a meaningful form, for it must reflect the central processing unit's evaluation of the problem. This unit of the biological computer is the muscles and the skin of the body.

Abnormal muscle function under these circumstances takes on a new and meaningful perspective.

Muscle weakness must be evaluated and interpreted as potentially reflexing the CPU. Thus abnormal thyroid function can be efficiently displayed into the Teres Minor muscle and proper interpretation and treatment can result in resolution of both the thyroid and Teres Minor muscle aberration.

The goal of the organism is to survive a potentially dangerous external and internal environment. Massive data (input) from these areas must be processed, adapted to or reacted upon successfully. Information not received cannot be included in the CPU evaluation. The complexity of the body necessitates an efficient organization.

Apparently, it operates on at least four different levels, each being responsible for organizing and monitoring its particular area of functioning with some overlapping into other areas. We call these areas computers of different complexities. They are: 1. The cerebral computer, 2. The glandular or autonomic nervous system computer, 3. The spinal computer and, 4. The local computer.

The first or primary computer relates to cerebral activity. It is by far the most complex for it is capable

of evaluation, integration and storage far beyond the other levels of function. The secondary computer is called the glandular computer. It regulates most automated functions as well as monitors the Endocrine system. Next, is the tertiary or spinal computer, which is responsible for communication, integration of information, and the chemistry of digestion. The local computer is the most rudimentary and is found in the motor point of each muscle and thought to be in other types of specific tissue. This functions as the display unit of the CPU. (See fig. Biocomputer).

Intelligent Terminals

The biocomputer contains many intelligent terminals which are a network of mini-computers or sub-systems in each of the four types of computers - primary, glandular, spinal and local. These terminals are responsible for capturing, correction and monitoring of input information, along with the entering of raw data to primary computers. These terminals also act as mediators between computers, as well as monitors of the cloacals, visual and labyrinthine mechanisms of posture. Information which represents an overload to a more primary computer may be inhibited or put on hold at this level, until this information can be processed successfully. These units are important.

Center Of Man

The bio-computer also has a center from which everything that occurs in the body must be focused. This center is the umbilicus, and has twelve areas that are arranged as a clock and are labeled as such. Any changes that occur in any of the computers must be processed through the center of man in order to allow proper integration.

Computer Locations In The Body

Each computer has a primary site or physical representative area in the body. At this site, analysis of proper function of that computer may take place.

K27

The primary physical location of the local computer (muscles) is an Acupuncture point called K27. It is located at the junction of the 1st rib, clavicle and sternum. The kinetic representative of K27 is the two divisions of the muscle, Sternocleidomastoid. Thus head turning is tied to local computer function and K27 identification. The bones related to the local computer are the clavicles.

Hyoid

The primary physical location of the spinal computer is S9, and the hyoid bone. Its kinetic relationship is its primary muscles. They are listed as follows: 1. Anterior and Posterior belly of Digastricus, 2. Stylohyoid, 3. Mylohyoid, 4. Geniohyoid, 5.Sternohyoid, 6. Sternothyroid, 7.Thyrohyoid, 8. Omohyoid. Muscles that are directly related to the computer (see 1-9 hyoid muscles) record or store all adaptive information. As display units of each computer, they reflect the status of that computer in time and space.

TMJ

The primary physical location of the Endocrine computer is the temporal mandibular joint (TMJ) and associated tissues. The acupuncture point is S7. The muscles of the Endocrine computer are as follows: 1. Masseter, Superficial Division, 2. Masseter, Deep Division, 3. Pterygoid Internus Medialis, Sphenoid Division, 4. Pterygoid Internus (Medialis), Palatine Division, 5. Pterygoid Externus (Lateralis), Sphenoid Division, 6. Pterygoid Externus (Lateralis), Lower Division, 7. Temporalis, Parietal Division, 8. Temporalis, Occipital Division.

Eye

The physical location of the primary computer is the eyes and its adjacent musculature. They are as follows: 1. Rectus Superior, 2. Rectus Medialis, 3. Rectus Inferior, 4. Rectus Superior Oblique, 5. Rectus Lateralis, 6. Rectus Inferior Oblique, 7. Trapezius, Upper Division. 8. Longus Capitus, 9. Semispinalis Capitus and possibly more. The bones of the cranium are to the primary computer what the vertebrae of the spine are to the spinal column. The acupuncture point of the primary computer is BI.

To Review

Each computer represents a level of expression and processing. Each level is capable of input, processing and output. The hierarchy is set so that the most important decisions are made by computers which are capable of the greatest degree of related computation. Thus problems of an endocrine nature are handled by the Endocrine computer. Problems of a muscle level are processed at this level also. However, since a muscle is a display unit for the other computers, muscle aberration requires special attention.

Kinesiology

In 1964 Dr. George Goodheart discovered a new diagnostic test for body evaluation. It was called Applied Kinesiology and consisted of muscle testing to evaluate the musculoskeletal status of the patient. Since 1964, the body of knowledge and application of Applied Kinesiology has grown to immense proportions.

Muscle testing is biological computer evaluation. If interpreted correctly, adequate insight into body signs, symptoms, and language are easily processed into meaningful information.

Adaptation

In the early stages of disease clear relationships exist between muscles and organs. Thus every thyroid dysfunction demonstrated a weak Teres Minor. Every kidney dysfunction demonstrated a weak Psoas muscle, etc. These decisions are generally a reflection of the strategy of the Endocrine computer. Perhaps at this point in time, all elements necessary for healing of the kidney are not available. The stress in the kidney and Psoas muscle are too great and the organism is threatened. This forces the Endocrine computer into a decision or what may be called an adaptation. The adaptation means in a practical sense that the weight or burden is switched to another organ. In a successful adaptation, frequently the pain or discomfort leaves and the patient may feel better even though the kidney problem still exists. In this case, depending on other variables, the Psoas muscle may return to normal tone. Switched means exactly what it says--the burden is delegated to another organ or tissue. Generally this results in a hypertonic organ or muscle related to that organ. To be switched, as is often stated in Applied Kinesiology, indicates a successful adaptation. Kinetic diagnoses made in adaptive stages are less significant. This is why the switching technique treatment has become so important.

As a disease proceeds in time, generally speaking, the display spreads. The muscle system may show many muscle weaknesses, but many are effects of the adaptation rather than the cause.

With the above understanding, a new conceptualization of disease may be presented. Disease can be represented as:

1. Breakdown in communications.
2. Conflict in strategies between levels of functions or computers.
3. Circuit overload.
4. Circuit erosion.
5. Inadequate input for adequate resolution.
6. Inadequate transferring of information, nutritional deprivation, RNA, neurotransmitters, etc.
7. Priority of CPU not recognized by treating physicians.
8. Abnormal input from oral cavity, i.e. suppressive drugs, etc.
9. Computer processing at full capacity and therefore data is put on hold.
10. Compartmentalization of aberrant tissue.

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CHAPTER III

THE ADAPTIVE SYNDROME

There is a principle which is a bar against all information, which is proof against all argument, and which cannot fail to keep a person in everlasting ignorance.
This principle is . . . contempt prior to examination.

by William Paley, Eighteenth Century

History

In the late 1940's and early 1950's Dr. Hans Selye, a noted Canadian Physician completed his research on stress and wrote "THE STRESS OF LIFE." This book discusses the "G.A.S." (General Adaptive Syndrome) and the L.A.S. (Local Adaptive Syndrome). The G.A.S. was divided into three phases: 1. Alarm 2. Resistive (adaptive) and 3. Exhaustive. These three phases describe the reaction of the body to stressors and have been called: 1. Shock phase 2. Counter shock phase 3. Resistance phase and 4. Exhaustive phase.

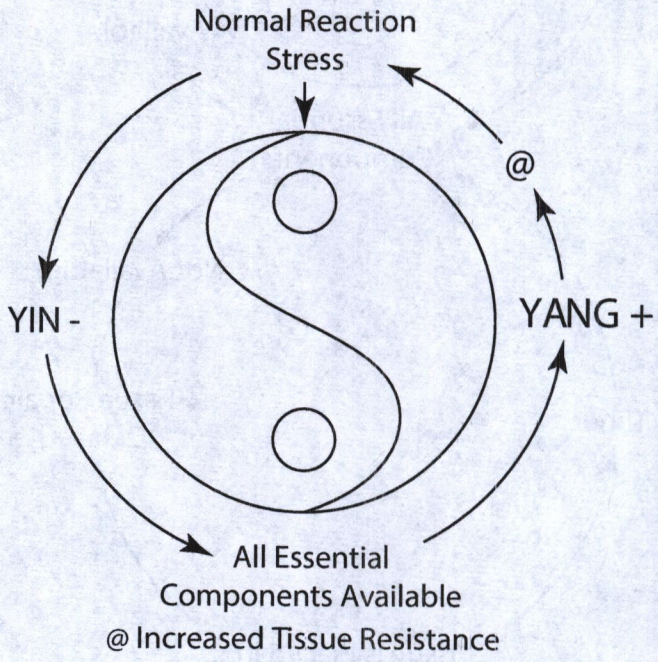
In Clinical Kinesiology there is a difference between resistive and adaptive states. Resistive refers to the ability of the inner mechanism of the cell or tissue to perform a task it was previously unable to achieve without major support from other tissues or organs. Adaptation is the failure of the inner mechanism of the cell to perform a task for it requires support from other tissues or organs. In the resistive stage, the cell does not borrow from the reserves of other tissues or organs.

Normal cells are biphasic in nature. Their basic functions include: 1. Catabolism (Yin) 2. Anabolism (Yang).

Catabolism is defined as destructive metabolism of the cell while anabolism is defined as constructive metabolism of the cell.

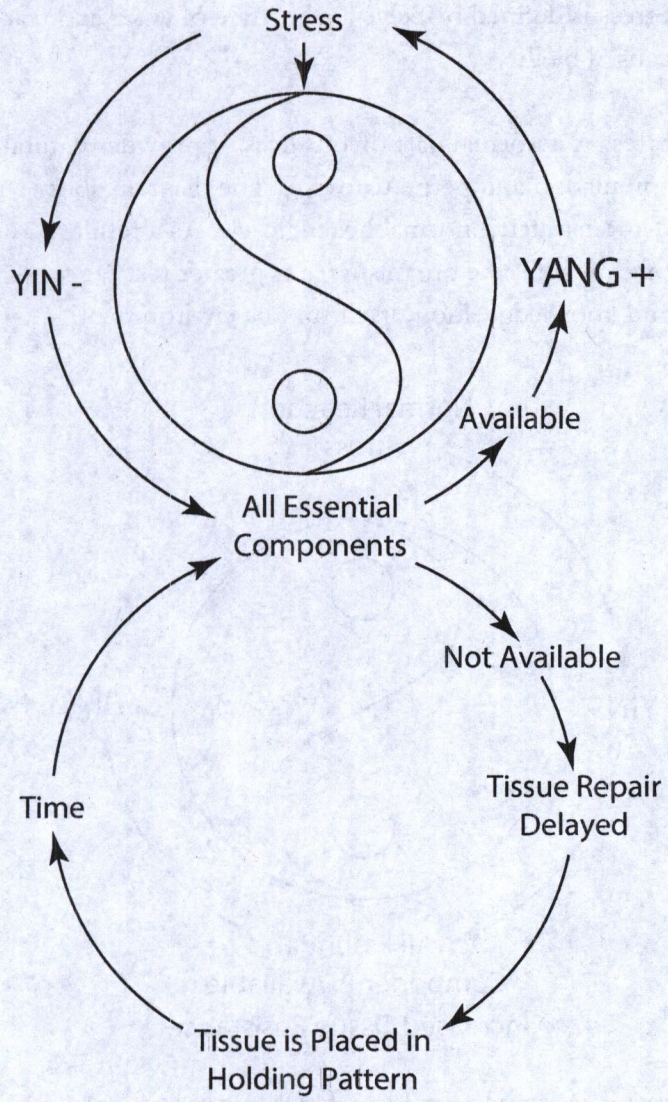
Stress is defined by Selye as the "rate of wear and tear caused by life."

Stress is a normal part of our lives. It provides natural stimulation and perpetuates life. The diagram above demonstrated a normal healing cycle. As a result of exposure, the organism gains greater resistance and knowledge about itself and its environment.



Greater resistance is achieved by having all essential components of tissue repair available. If they are available tissue repair takes place and the cell survives. If these components are not available the tissue is placed in a holding pattern to allow time for all components to be made available. It is important to be aware of the essential components of repair. They are divided into two parts: 1. External and, 2. Internal Factors.

I. External Factors
- A. Nutrition
  - 1. Proteins - amino acids
  - 2. Carbohydrates
  - 3. Fats
  - 4. Minerals
  - 5. Vitamins
- B. Electromagnetic Energy



We live in a sea of energy. Under normal circumstances we utilize energy from the sun, earth, moon, water, air, plants, etc.

C. Rest
D. Exercise
E. Absence of these negative external stressors, i.e.
1. Financial worries
2. Family problems
3. Bacteria, virus, parasites, etc.
4. Trauma
5. Overuse syndromes
6. Aberrant emotional patterns
7. External environment overload – heat, cold, etc.

II. Internal Factors
A. Blood supply
B. Lymphatic drainage
C. Minimum venous stasis
D. Nerve supply
E. Structural alignment
F. Acupuncture energy - "Chi"
G. Adequate hormone levels
H. No interference from other systems:
1. Viscera
2. Other muscles
3. Glands
4. Mental State
5. Emotional state
6. Nervous system

In order for tissue repair to take place all of these factors must be available in "sufficient" quantity in the tissues that are participating in healing.

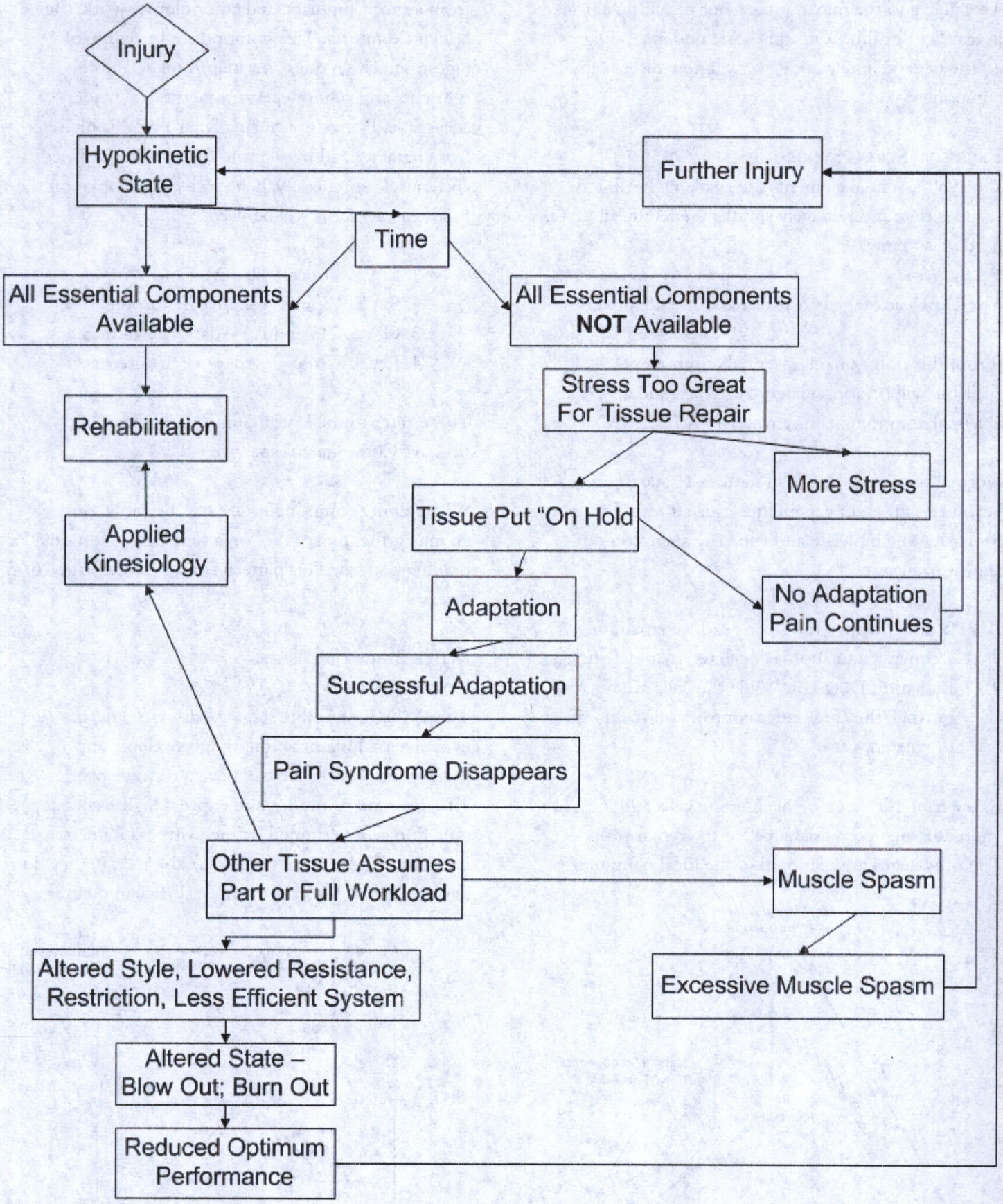
The chart below describes the steps the body generally takes following an injury.

The injury that does not rehabilitate but undergoes a successful adaptation has the following problems:

1. Some other tissue has assumed at least part of its work load.
2. The related tissue has altered functions i.e. stiffness, spasm, hypokinesia, etc.
3. Somewhere in the organism there is a reduction in performance.
4. Diminishing of the reserve force and draining the organism of its positive strengths.
5. The organism as a whole is less efficient and restrictive.
6. Further injury potential.

The science of Clinical Kinesiology is dedicated to help the doctor accurately diagnose the conditions of the body and the factors that may be missing or interfering with the optimum healing process. If the Doctor intercedes at the right time, the healing process can be successfully guided and enhanced with increased resistance without a general adaptive syndrome.

The Injury Syndrome



When the day comes that all stress is maintained within the triphasic and biphasic stages of healing, we will live to the maximum of our physical vehicles in excellent health. With this basic understanding of the general injury cycle, we will now discuss its component parts.

Excessive Stress Syndrome

When all essential elements are available healing of tissue is easy and relatively simple. Generally all that is needed is -Time!

The Triphasic Stage is resistive and not adaptive.

(From this point on, all essential components available will be abbreviated -A.E.C.A. and all essential components not available-A.E.C.N.A.).

Normal tissue is biphasic in nature. Tissue injured beyond its inherent capabilities cause it to become triphasic. The biphasic and triphasic stages do not appear to have:

1. Any positive T.L.
2. Any positive mode or produce any high frequency radiation as detected by the Toftness Radiation Detector. While the cells are not normal, they are under control and the tissue is organized.

In the triphasic stage of healing the cells and local injured tissue need assistance for the repair process. Their messages are recorded in the local computer network and the AECA may be provided from that level. If not, the local computer requests assistance from a more sophisticated computer network, the Spinal Computer. This computer is in charge of digestion. The request for help is made and the nutrients and other necessary factors are made accessible. Pain is not normally part of this phase. It is characterized by slight tissue swelling, stiffness and muscle soreness. When discussing adaptation the following symbols will be used:

1. L.A.S. - Local Adaptive Syndrome
2. S.A.S. - Spinal Adaptive Syndrome
3. G.A.S. - Glandular Adaptive Syndrome
4. P.A.S. - Primary Adaptive Syndrome

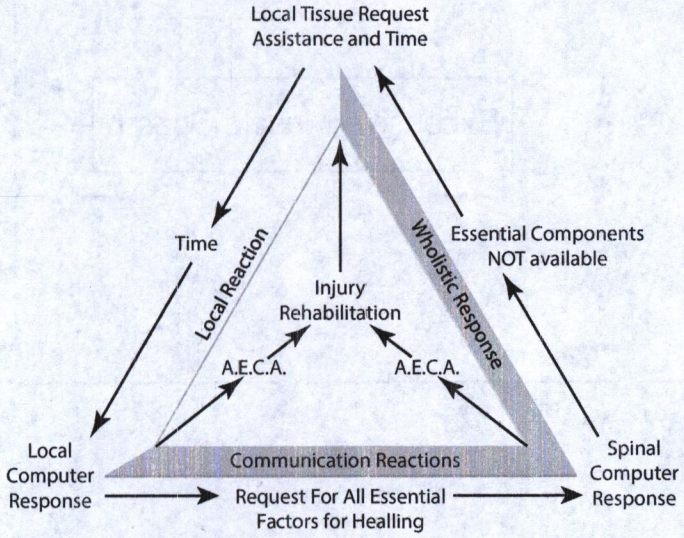
These refer to the Local, Spinal, Glandular, and Primary Computers respectively.

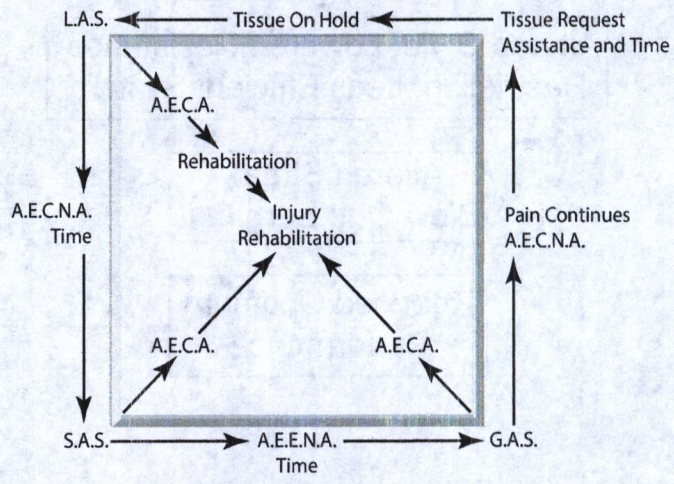
When all the components are not available to resolve an injury, the injury takes on a new dimension called a holding pattern. This pattern is the "Acute Stage" of disease.

Acute Stage of Disease

Holding Pattern

This is the first visible stage of disease. There is evidence of inflammation, tissue swelling, and sharp pain. This tissue will have a positive palmer T.L., respond to modes and express high frequency radiation as determined by the Toftness Radiation Detector. These tissues are A.E.C.N.A. or if they do have sufficient material it is in insufficient quantity





for tissue healing. The tissue may be so damaged that more time is necessary to set the stage for healing. This is very common in bone fractures, ligament strains, cuts and bruises, etc.

Tissue requests are first handled by the Local and Mini-Computers (L.A.S. Local Adaptive Syndrome). If unable to handle rehabilitation, the problems are passed to another level of hierarchy, the Spinal Computer. Here efforts are made to initiate rehabilitation. If this is not possible, requests are passed to the next hierarchy. In the acute stage of healing, the Glandular Computer is the highest level of decision making. It may decide to produce more hormones by accelerating specific organs and by suppressing others. It has several options. If rehabilitation is not initiated within a reasonable period of time, the patient's CPU may accelerate the acute phase producing enough inflammatory reaction to complete the healing.

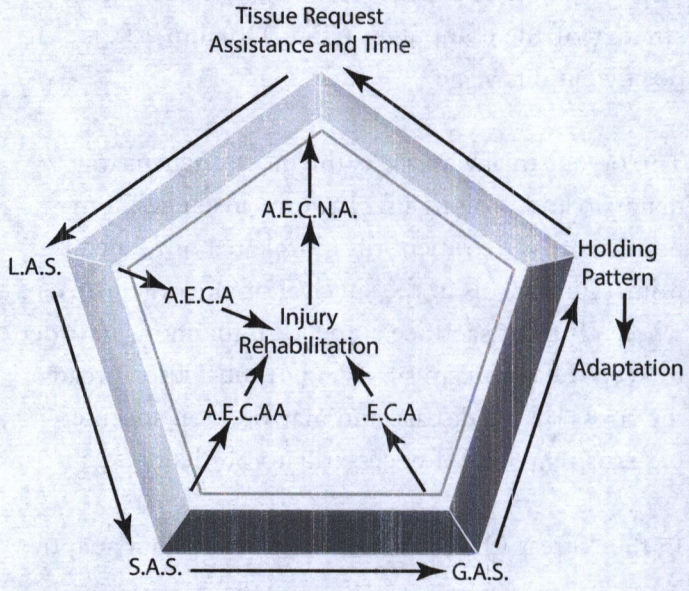
If rehabilitation occurs, the patient is taken out of the holding pattern and placed in the triphasic stage for its completion. Sometimes the stress on this particular system is so great that more reserves must be sought and the body then switches to the sub-acute stage of healing. This is the first real stage of biological adaptation and is more than a holding pattern. The C.P.U. must develop strategy and commit itself to a precise course of action resulting in a reduction of general energy, and a commitment of certain energies, hormones, glands, liver and adrenal action, etc, to protect the injured area being healed.

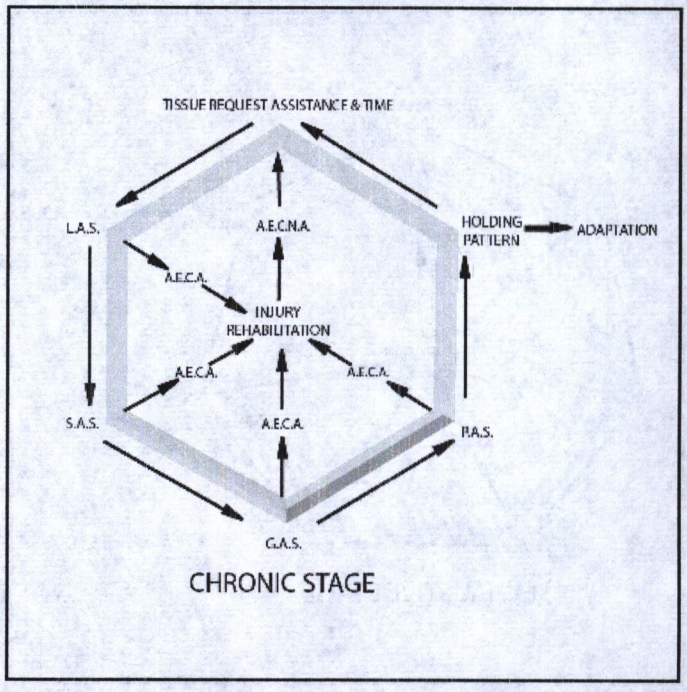
Compartmentalization Or Segmentation

True adaptation takes place where the L.A.S. and S.A.S. are unable to deal with stress by adequate resistive action. The goal of the organism is to survive a hostile external and sometimes internal environment. A tubercular cyst is a good example of the C.P.U. moving from the acute to sub-acute and from the chronic to degenerative stages. In each step there is a loss of energy as the body attempts to share the stressor with other parts of the body. This accounts for healthy organs in one part of the body while other parts are weak and prone to disease.

Once we recognize the system the body uses for adaptation, it is then necessary to find the number of steps the body has taken for adaptation. The deeper the problem, the less chance the body has to generate its own internal healing. Therefore it requires external support systems to return to normal function.

The sub-acute stage is transitional in nature. It is not a major holding area in disease patterns. The body sets its strategies better in the acute, chronic and degenerative stages. In this stage the Glandular Computer has committed itself and the Primary Computer is left with the adaptive decisions.



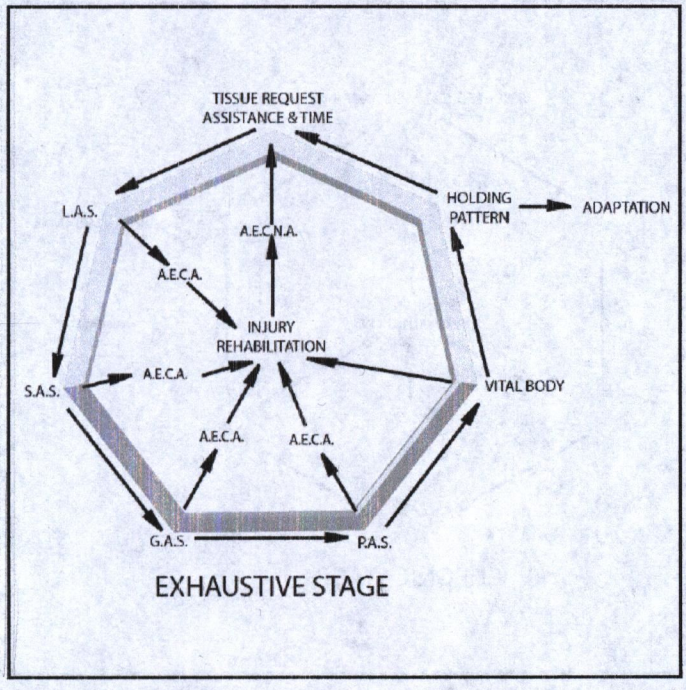


In the chronic phase sharp pains have disappeared because the body has undergone a successful adaptation. The patient complains of occasional dull aches, sensations, loss of energy and inability to perform certain physical feats. Remember that this adaptation can be very specific and does not necessarily mean that there is a gross shift in vitality. Most people are dealing with several problems in the chronic stage and a few in the degenerative stage by the time they are 50 years old.

The important thing to remember in chronic as well as the rest of the disease stages is that the patient is in a definite adaptive pattern. The muscle weakness and positive T.L. seen are most frequently an aberrant display of kinetic systems responding to an overall strategy of the computer's CPU. Dorsum T.L. is positive in this stage.

The organism always seeks the most efficient way to maintain and prolong life. In some instances, it may do this to the detriment of a local area or tissue. Its primary interest is in the survival of the organism as a whole. It must sacrifice some local functions in order to keep the organism surviving. It must also spread the stress of the disease and may develop specific patterns that are not necessarily to our liking.

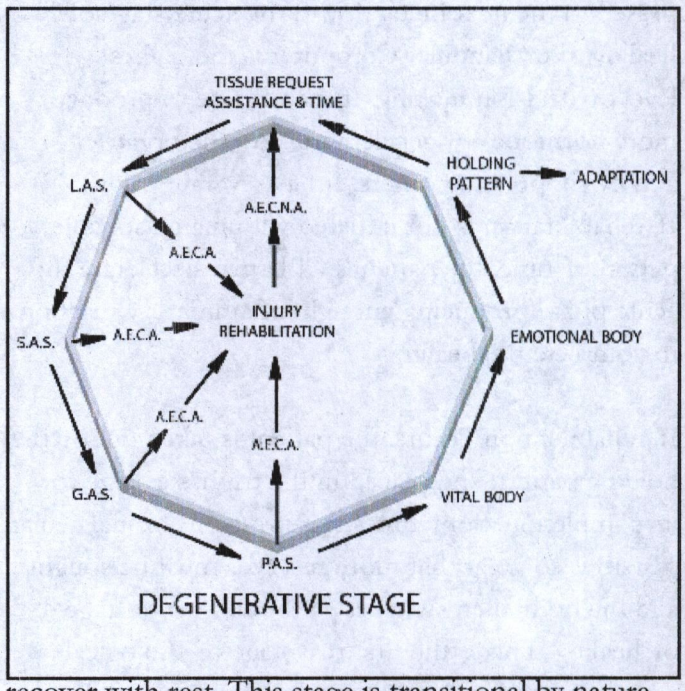
In the "Stress Of Life", Dr. Selye talks about adaptive



EXHAUSTIVE STAGE

energy. This energy is the acupuncture system. We have found that aberrations in the cloacal mechanism, the gaits, and the group muscles are all physical evidence of the activation of adaptation. These mechanisms will be discussed in the chapter on clearing techniques.

In this stage of the disease the tissue is exhausted and unable to maintain reasonable energy. The tissue is losing its polarity and does not appear to be able to

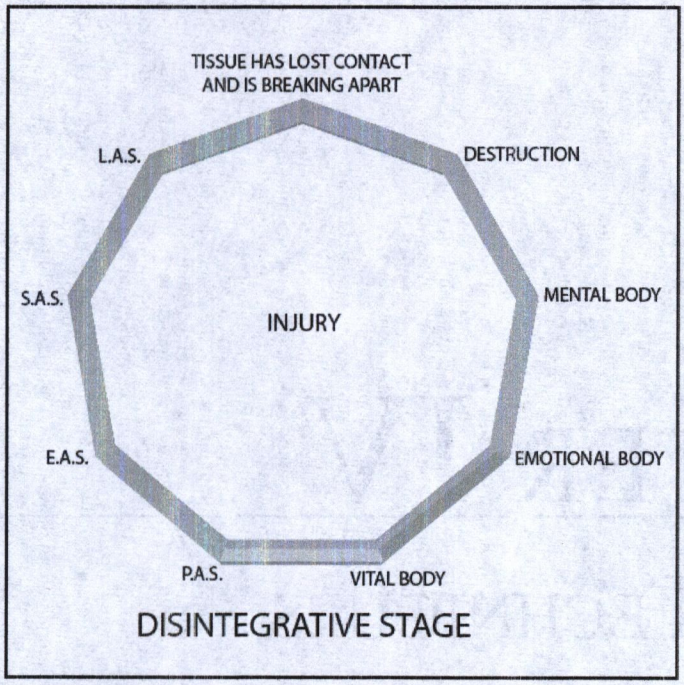


DEGENERATIVE STAGE

recover with rest. This stage is transitional by nature and is not a stable position. There is less vitality and function than in the chronic stage, but it is not in a degenerative stage.

At this stage of the disease rehabilitation is very questionable for most people. It will take a long time of consistent treatment to allow this area or tissue to regain its vitality. Cellular metabolism does not change over night. Under conscientious treatment the cells in certain tissues may start modifying and upgrading their function. This represents a drain of the vital and emotional bodies. In the degenerative stage the person can become very emotional for no apparent reason.

Notice that the mental body is activated in this stage. The will of the soul is keeping the tissue from dying.



There is no vitality in the tissue for it has degenerated and is now in its final stages ready for death. This may be a totally isolated area of the body and does not necessarily reflect the organism as a whole.

Dr. Selye has presented a general picture of adaptation. We have tried to expand these concepts to give precise steps that the individual organism develops while in moving through the disease process. The treating physician is concerned about the priorities of the organism and how to help it solve these problems in a reasonable, rational and natural way if at all possible. In these later stages the organism may be helped best by surgical extraction of the disintegrating tissue.

The following thoughts should be kept in mind.

1. There is a significant difference between resistance and adaptation.
2. When stressors exceed resistive resources, the tissue undergoes specific stages of resistance and adaptation. They are as follows:
    a. Biphasic
    b. Triphasic
    c. Acute
    d. Sub-acute
    e. Chronic
    f. Exhaustive
    g. Degenerative
    h. Disintegrative

These stages may be compartmentalized and may not necessarily reflect the organism as a whole.

Our goal is to find ways to measure and increase our resistance without initiating the adaptive process. Adaptation should be a temporary state if the stressors are intense and prolonged. Adaptation leads to tissue exhaustion and death.

CHAPTER IV

CLEARING TECHNIGUES

The mere looking at externals is a matter for clowns, but the intuition of internals is a secret which belongs to physicians.
by Paracelsus

Computer Clearing Techniques

Computer Clear Out

Frequent observations by Applied Kinesiologists suggest that the number of muscle weaknesses in an area of complaint appears out of proportion to the number of organs actually involved. Certainly not all muscles are reflecting an organ dysfunction. In painful situations, numerous feedback systems and computer adaptations lead to a mass of overriding neurological output which results in multiple muscle aberrations.

In chronic degenerative conditions, the body spreads the stress to many areas (muscles, organs).

Basic challenges must be used so that the doctor can accurately determine if the CPU and each of the computers are functioning properly.

The most efficient entry point at this time is the use of the "Now" or Alarm Points of the acupuncture system. (See charts for Alarm Points).

The Chinese system of acupuncture states that Chi or energy, while being present in all meridians, concentrates its energy in a specific meridian for a two hour period. This wave of energy (wave crest) follows a predictable sequence and can be measured kinetically by therapy localizing the Now or Alarm Point of each respective meridian. The Alarm Point of the meridian, when in its horary period, should T.L. in the clear. The Now Point and the Alarm Point are considered the same.

Challenges for the Alarm Point

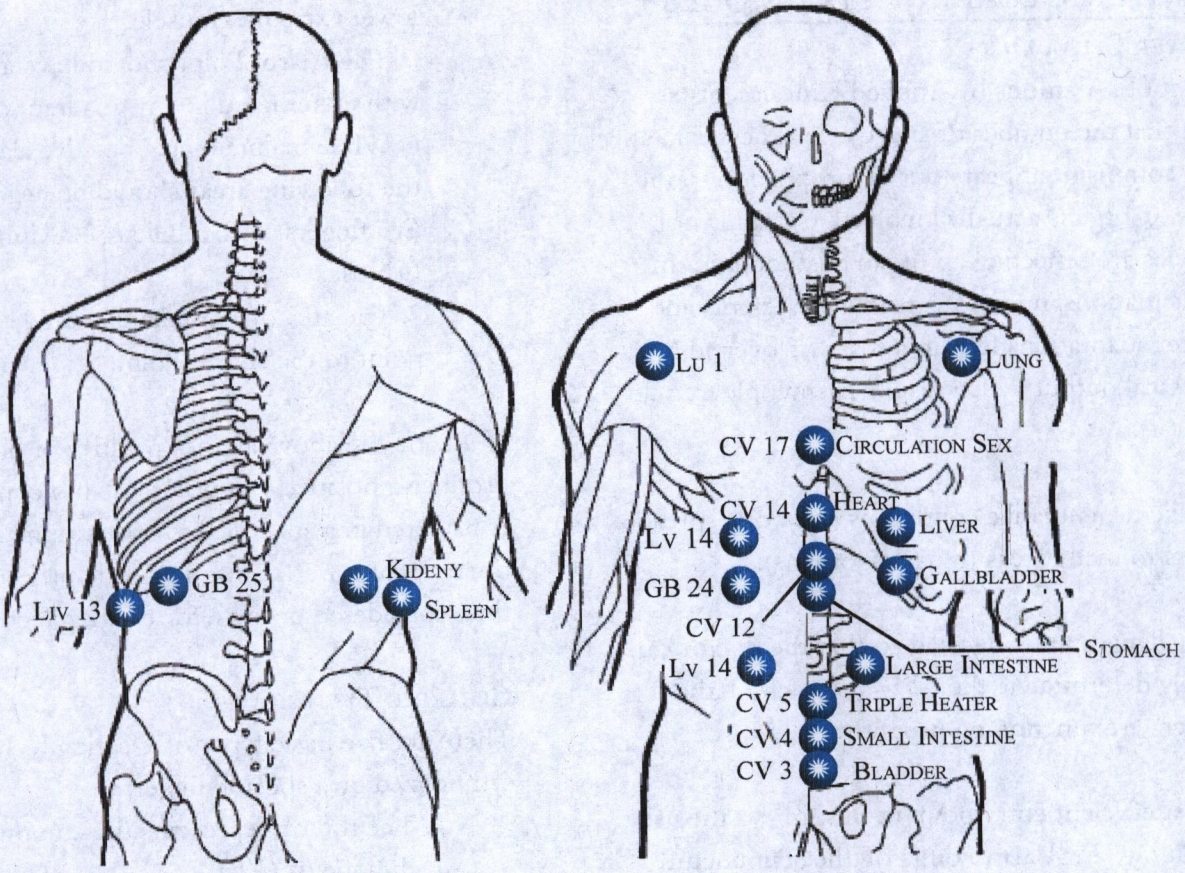
1. The Alarm Point should have a positive bilateral T.L. in the clear.
2. The Dr. should be able to elicit a positive T.L. as well as the patient.
3. The Alarm Point when T.L. should produce muscle weakness in all intact muscles in all four quadrants and the neck.
4. The Alarm Point should produce a positive two-point when the contralateral hand is placed over the ipsilateral hand while testing a lower extremity muscle.
5. The Alarm Point should have a positive T.L. with either hand in any quadrant of the body.
6. While maintaining a positive alarm point, the following areas should be negative with all five fingers: A. Umbilicus, B. Xiphoid, C. Lips, D.Nose.
7. The area of complaint should always two-point to the Alarm Point.

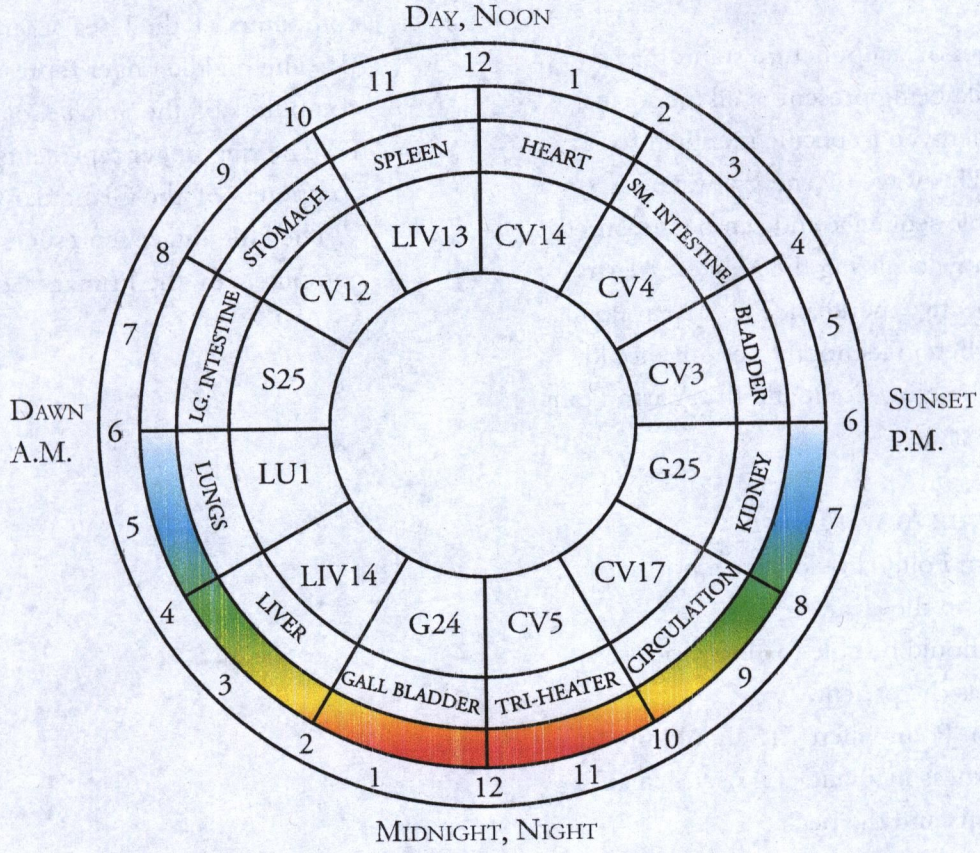
If any of the above are not positive or do not produce a positive two-point, the bio computer is considered in a stage of bio-adaptation and not operational for efficient diagnostic procedures. It is then considered positive for clearing techniques.

Clearing Techniques

There are five basic types of clearing techniques each symbolized by a specific finger:

I. The thumb represents the computer clearing technique (C.C.T.).
II. The index finger represents the mini-computers of the Local Computer.
III. The middle finger represents the mini-computers of the Spinal Column.
IV. The ring finger represents the mini-computers of the Glandular Computer.
V. The little finger represents the mini-computers of the Primary Computer.



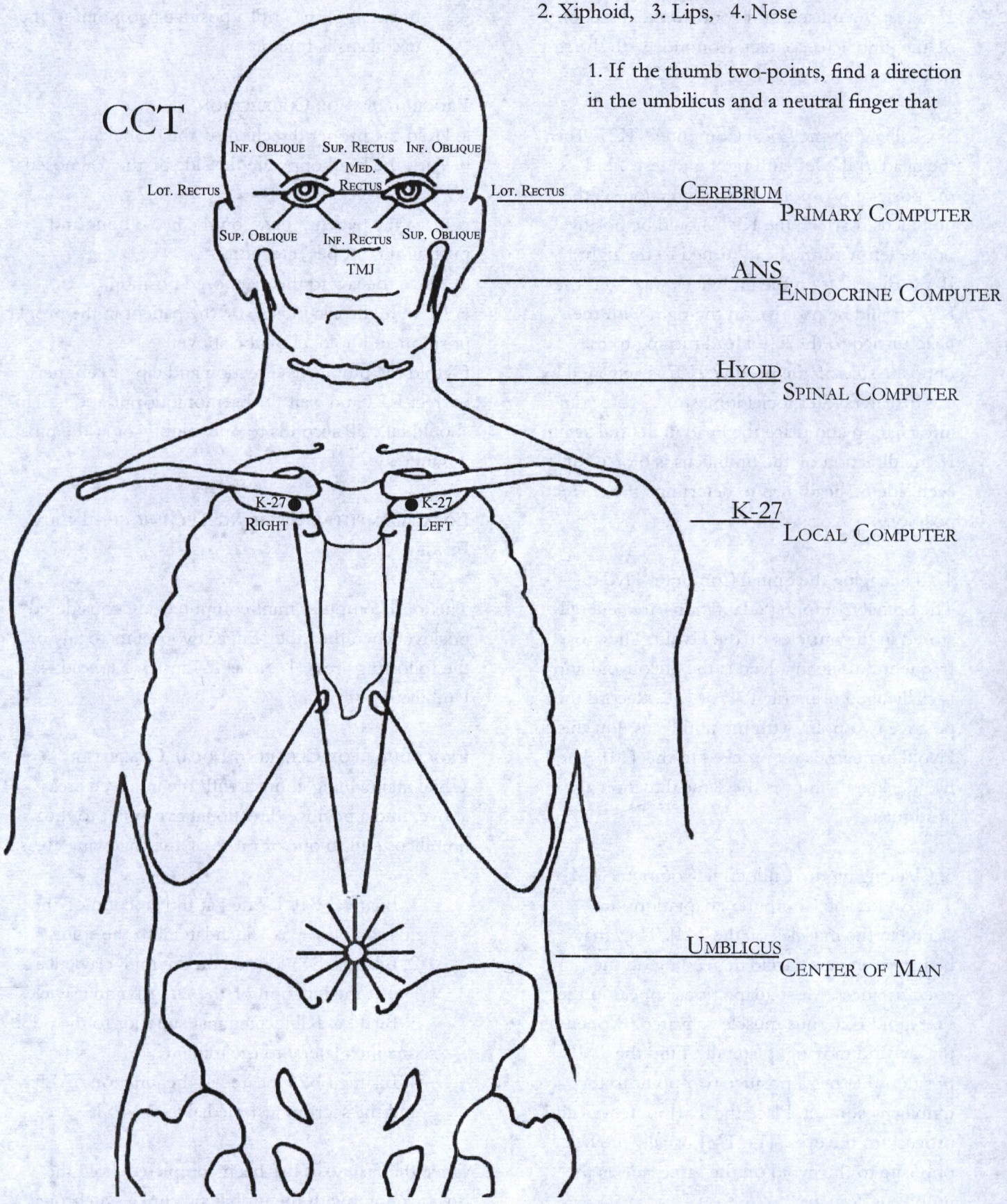


Note: The acupuncture points listed above are the Alarm or "Now Points" for their respective meridians. The above chart represents Daylight Saving Time. For Standard Time, move back one hour.

A) C.C.T. Computer Clearing Technique Thumb

The C.C.T. is the most complex of all clearing techniques. It involves activation of all computers and represents a major shift in bioadaptation. The C.C.T. is considered positive when any of the following areas has a positive two-point to the thumb. 1. Umbilicus, 2. Xiphoid, 3. Lips, 4. Nose

1. If the thumb two-points, find a direction in the umbilicus and a neutral finger that



also two-points to that muscle or muscle group. There are 12 possible directions to the umbilicus. (See CCT Chart).

2. Retest the muscle and confirm the direction of the umbilicus contact. Continue with the rest of the computer clear out.

3. Challenging the Local Computer - K27. Turn the head to the left and right and test. Find the positive two-point. If the direction of the umbilicus was 1-5, the K27 should be positive on the left with the head turned to the right. If the direction on the umbilicus was 7-11, the K27 should be positive on the right with the head turned to the left. Head turning to the opposite side of the positive K27 is activated by the Ipsilateral Sternocleidomastoid. Note your information and place the head in neutral again. If the direction of the umbilicus is 6 or 12, test each side of head turn to determine the correct position.

4. Challenging the Spinal Computer-Hyoid. The Spinal Computer adaptations are generally stored in the muscles of the Hyoid. The most frequent muscle involved is the Stylohyoid and is challenged primarily R-L or L-R. Record the positive two-point with the umbilicus. Put the Hyoid in neutral and proceed to the TMJ. The hyoid generally moves the same direction as head turn.

5. Challenging the Endocrine Computer-TMJ. The Endocrine Computer adaptations are stored in the muscles of the TMJ. They may be hypertonic or flaccid depending on the circumstances. Most adaptations appear in the Pterygoid Externus muscle activated by opening the jaw and moving it laterally. Find the TMJ position that has a positive two-point to the umbilicus contact. Place the TMJ in neutral and proceed to the eyes. The TMJ usually moves opposite to the hyoid on the same side as the umbilicus contact.

6. Challenging the Primary Computer-Eyes. The involved eye is usually found positive on the same side as the TMJ. Activate each of the eye muscle groups until a positive two-point to the umbilicus is found.

Procedures For Correction

a. Hold the proper direction of the umbilicus.
b. Turn the head opposite the side of the diagnosed K27.
c. Place the patient's hand on the hyoid bone and push in the proper direction.
d. Move the jaw to the diagnosed position.
e. Activate the eye muscle of the patient in the proper position and hold all of the above.
f. Hold the umbilicus direction and tap or rub the correct K27 and wait for harmonious pulsations. This should take 30 seconds to one minute, or at the most 2 minutes.

Local Computer Clearing Technique - Index Finger

The local computer mini-computers are considered positive when the index finger two-points to any of the following areas: 1. Nose, 2. Lips, 3. Xiphoid, 4. Umbilicus.

Procedure for Clearing Local Computer

While maintaining contact with the involved areas above, find a positive directional two-point to the umbilicus and to one or more of the following areas:

1. Bilateral B10 located at the junction of the atlas and the axis 1 inch lateral to the spine.
2. Bilateral S13 located on the mid clavicular line at the junction of the 2nd rib and clavicle.
3. Bilateral Kll located just superior to the pubis one inch lateral to the midline.
4. Bilateral B26 located at the junction of L5 and the sacrum just medial to the PSIS.

Once the diagnosis has been completed, hold the positive point with the umbilicus until a synchronal

pulsation is felt.

C) Spinal Computer Clearing Technique Middle Finger

The spinal computer mini-computers are considered positive when the middle finger two-points to any of the following areas: 1. Nose 2. Lips 3. Xiphoid 4. Umbilicus

Procedure for Clearing Spinal Computer

While maintaining contact with the involved area above, find a positive directional two-point to the umbilicus and to one or more of the following areas:

1. Bilateral L115 located at the junction of the humerus and the scapula.
2. Bilateral G30 located on the fascia just inferior to the greater trochanter.
3. Anterior Cloacals - see Anterior Cloacal Reflexes, this chapter.
4. Visual reflexes - see Visual Righting Reflexes, this chapter.

Once the diagnosis has been completed, hold the positive points with the umbilicus until a synchronal pulsation is felt.

Glandular Computer Clearing Technique- Ring Finger

The glandular computer mini-computers are considered positive when the ring finger two-points to any of the following areas:1. Nose 2. Lips 3. Xiphoid 4. Umbillicus

Procedure for Clearing Glandular Computer

The hand and foot gait reflexes are considered to be the mini-computers of the Glandular Computer. While maintaining contact with one of the 4 areas above, find a positive directional two-point to the umbilicus and to one or more of the gaits (See section on Gaits).

Once the diagnosis has been completed, hold those points with the umbilicus until a synchronal pulsation is felt.

E) Primary Computer Clearing Technique - Little Finger

The primary computer mini-computers are considered to be positive when the little finger two-points to any of the following areas:
1. Nose 2. Lips 3. Xiphoid 4. Umbilicus

Procedure for Clearing Primary Computer

The entry acupuncture points are considered to be the mini-computers for the primary computer. These areas will be identified from medial to lateral, head to foot. While maintaining contact with one of the 4 areas above, find a positive directional two-point to the umbilicus and to one or more of the following areas:

Eye:

1. B1 located on the medial aspect of the eye.
2. G1 located on the lateral aspect of the eye.
3. S1 located on the inferior aspect of the middle of the eye.

Chest:

4. L1 located on the anterior aspect of the scapulo-humeral junction.
5. CX 1 located on the anterior and lateral aspect of the chest just lateral to the nipple at the 5th rib.
6. H 1 located in the axillary fascia at the junction of the scapula and the humerus.

Hand:

7. Si 1 located at the base of the cuticle of the little finger.
8. TW 1 located at the base of the
9. Li 4 located at the junction of the proximal section of the 1st and 2nd metacarpals.

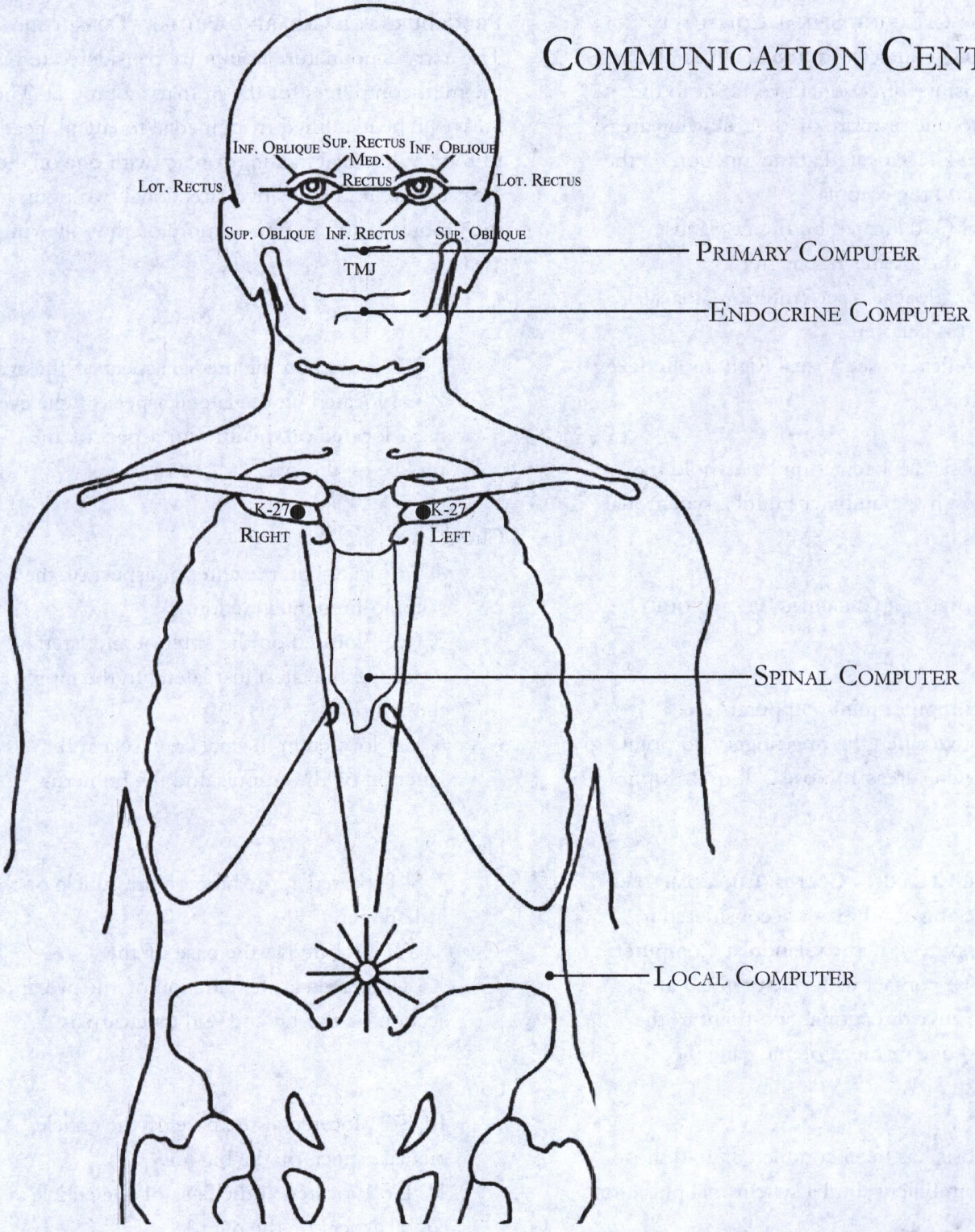
Foot:

10. SP 1 located at the base of the cuticle, medial aspect, of the big toe.
11. LV 1 located at the base of the cuticle at the lateral aspect of the big toe.

12. K 1 located at the mid—metatarsal plantar surface of the foot in line with the 3rd metatarsal.

Once the diagnosis has been completed, hold the positive points with the umbilicus until a synchronal pulsation is felt.

Listed in this section under clearing techniques are gaits, cloacals, and group muscle testing. Our knowledge at this time indicates that a patient is clear when they have complied with those standards listed under challenges for the alarm point, and have normal gaits, cloacals and group muscle tests.



Gait Tests

The gait mechanism and its application to Applied Kinesiology by muscle testing were introduced to the Chiropractic Profession by George Goodheart, D.C. in 1974. His original presentation consisted of four basic gait mechanisms which became known as the liver, spleen, stomach and gallbladder gaits. These gaits were named according to the acupuncture meridian which contained their respective active reflex. All were located on the foot.

Dual simultaneous muscle testing was a new concept in Applied Kinesiology. Prior to 1974 only single or isolated muscle testing had ever been used. Gait testing opened a new opportunity in exploration of body language.

History

Dr. Goodheart's original gait tests covered four of the six meridians of the foot. Our personal research concluded in 1975 - 76 resulted in two additional gait tests - kidney and bladder. This investigation also suggested that the acupuncture point generally related to the gait mechanism was located on the distal aspect rather than the proximal aspect of the metatarsals. In 1978, further research resulted in the development of hand gait reflexes which were then coordinated with the foot gait reflexes. (See chart below).

GAIT	FOOT	CONTRALATERAL HAND
Bladder	B 65	L 10
Liver	LV 2	Li 3
Kidney	K 1	Si 3
Stomach	ST 44	H 8
Gallbladder	GB 43	CX 8
Spleen	SP 3	TW 3

Functions

The gait mechanism appears to be associated with the following:

1. General adaptation of the CPU.
2. Mobilization of the human body through time and space by coordinated contralateral muscular activity.
3. Neurological activity of the spinal cord.
4. Reflex activity of the Endocrine computer system.

All gait treatment points are located at the distal end of each of the metatarsals. Each of the gait muscle challenges will be demonstrated later in the chapter.

Diagnosis

Gait energy affects muscular coordination between the upper and lower contralateral extremities. Therefore, testing for gait imbalance involves testing a lower extremity muscle against a contralateral upper extremity muscle to determine if they are able to contract simultaneously. In a gait aberration one or both muscles will test weak when tested simultaneously, while the individual muscle will test strong.

Manual muscle testing (see next section) is by far the most efficient method of determining a positive gait aberration. General therapy localization is often used but not necessarily valid. The general clearing technique will usually point out the need for gait therapy. Disturbances in gait function are often detected by visual examination. These are then confirmed by manual muscle testing.

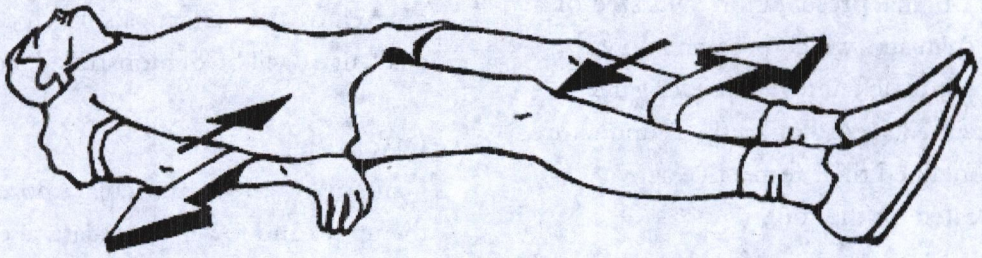
Specific Muscle Tests

All muscle tests are performed in a supine position. The large white arrows indicate the direction of test. The small black arrows indicate patient resistance.

Bladder Gait: Contralateral Hip and Shoulder Adductors. Adductor Longus(804) vs Contralateral Latissimus Dorsi (428).

Patient: Supine. Adduct ipsilateral femur. Internally rotate contralateral humerus keeping elbow extended and adduct elbow to side of body.
Dr.: Contact ipsilateral knee and with contact at dorsal aspect of contralateral forearm, attempt to abduct arm and leg from side. The test may be performed by adducting the arm forcefully and testing the hip adductor.

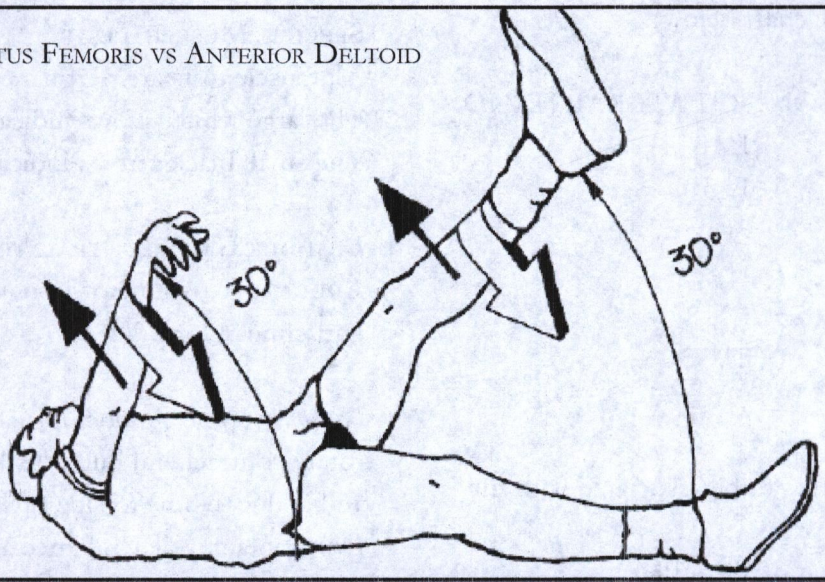
Bladder Gait - Adductor Longus vs. Latissimus Dorsi

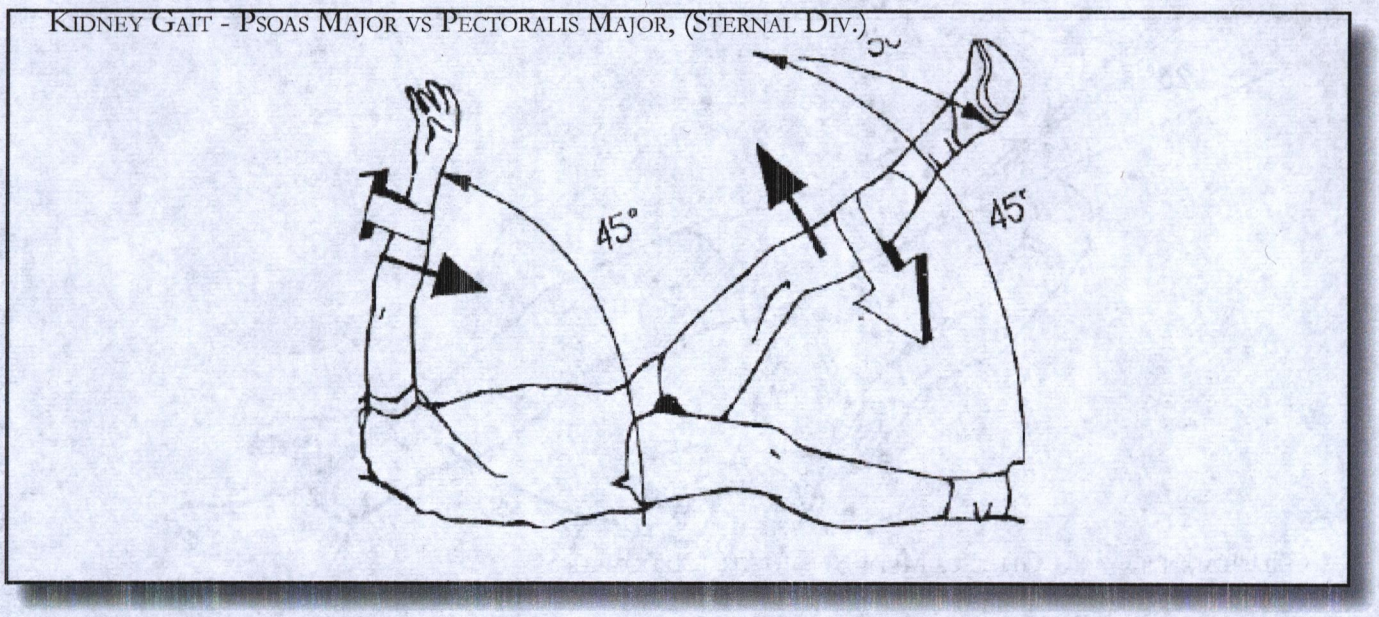


Liver Gait: Contralateral Hip and Shoulder Flexors. Rectus Femoris (796) vs Contralateral Anterior Deltoid (416).

Patient: Supine. Flex thigh 30 degrees from table keeping knee extended. Flex contralateral shoulder 30 degrees with slight internal rotation of humerus keeping elbow extended.
Dr.: With contact at anterior surface of ankle and second contact at dorsal surface of forearm, attempt to simultaneously extend arm and leg.

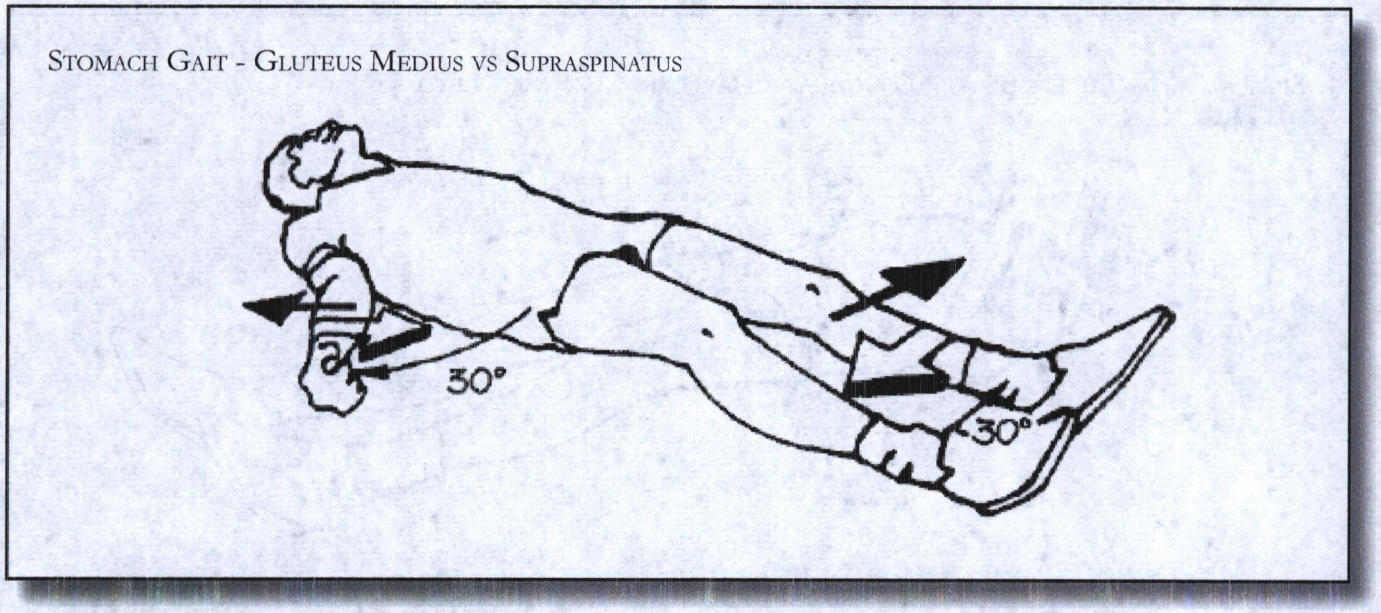
Liver Gait - Rectus Femoris vs Anterior Deltoid





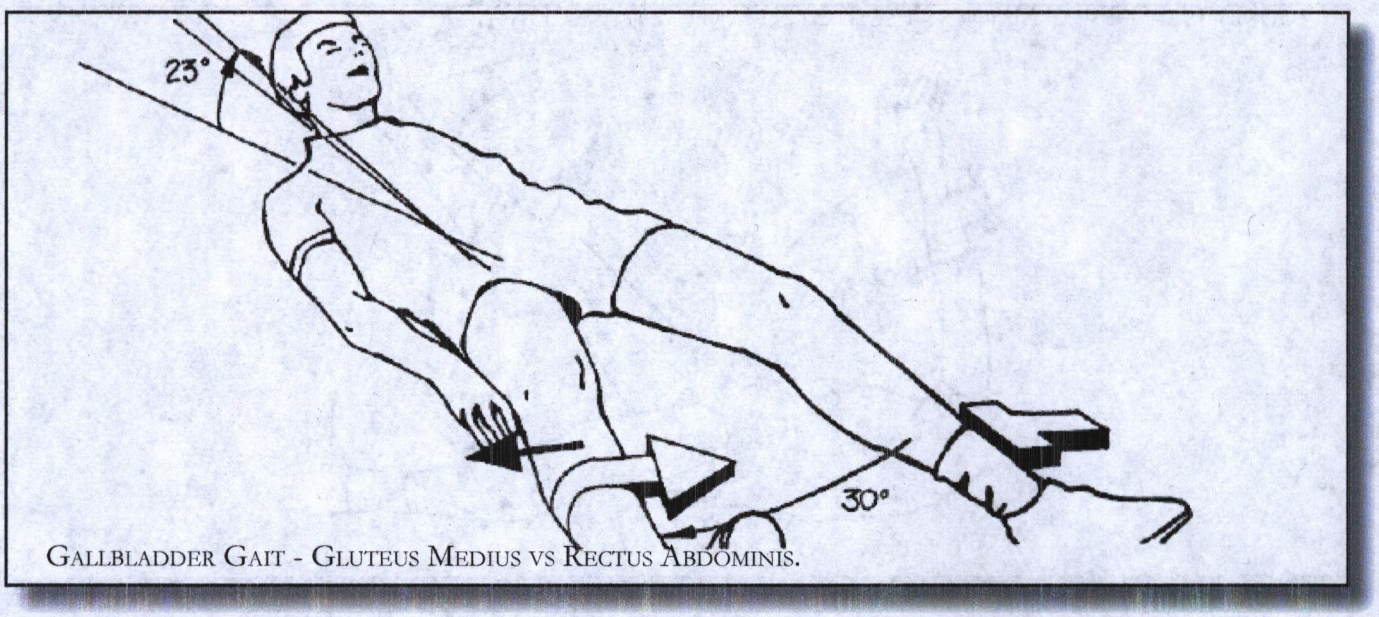
KIDNEY GAIT: Psoas Major (724) vs Contralateral Pectoralis Major, Sternal Division (400).

Patient: Supine. Flex the ipsilateral femur 45 degrees with 30 degree abduction and full external rotation. Flex contralateral humerus 45 degrees with full internal rotation.
Dr.: Contact ipsilateral medial malleolus and contralateral wrist and abduct arm and leg.



STOMACH GAIT: CONTRALATERAL HIP AND SHOULDER ABDUCTORS. Gluteus Medius (782) vs Supraspinatus (420).

Patient: Supine. Abduct ipsilateral femur 30 degrees from midline with no rotation (foot up). Abduct contralateral arm 30 degrees keeping palm toward body.
Dr.: Contact contralateral malleolus and ipsilateral dorsal surface of forearm to adduct leg and arm simultaneously.

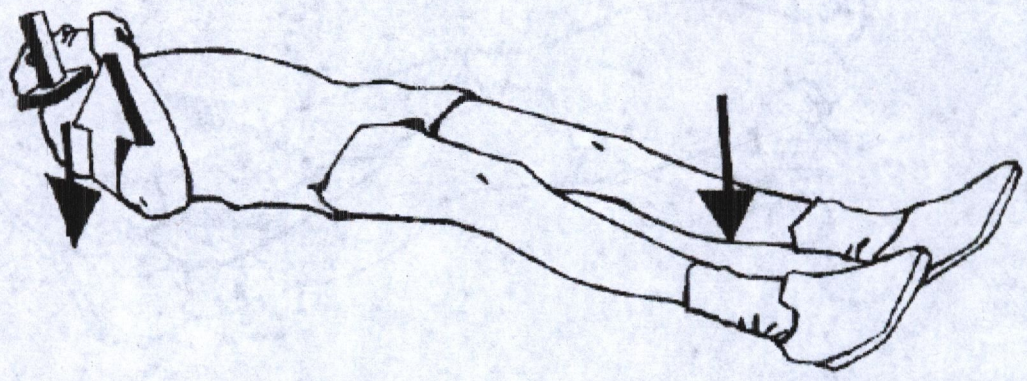


GALLBLADDER GAIT - GLUTEUS MEDIUS VS RECTUS ABDOMINIS.

GALLBLADDER GAIT: CONTRALATERAL HIP ABDUCTOR. Gluteus Medius, Middle Division (782) vs contralateral Rectus Abdominis.

Patient: Supine. Abduct ipsilateral femur 30 degrees with no rotation. Flex trunk 23 degrees from horizontal plane to look knees. (Activate abdominals).
Dr.: Stabilize contralateral ankle and with ipsilateral malleolus contact, adduct the leg.

SPLEEN GAIT - TRICEPS BRACHII LONGHEAD VS GLUTEUS MAX. (SAC. DIV.)



SPLEEN GAIT: CONTRALATERAL HIP EXTENSORS. Gluteus Maximus, Sacral Division (850) vs contralateral Triceps Brachii, Long head (434).

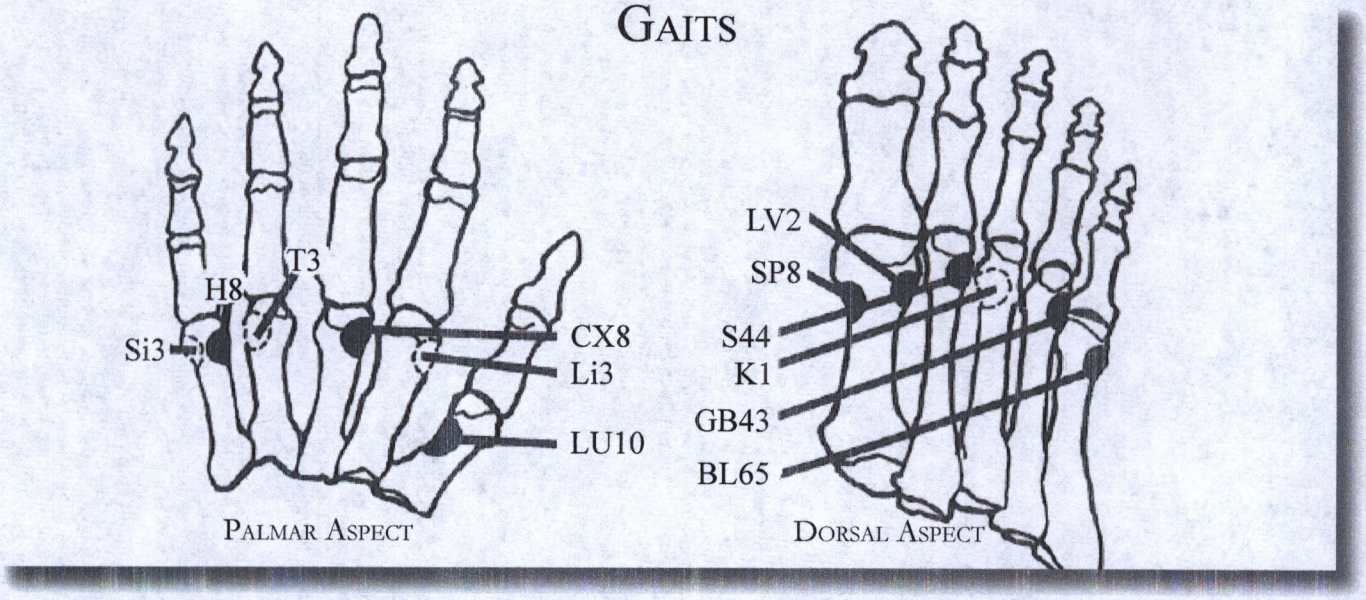
Patient: Supine. Raise ipsilateral leg from table keeping knee extended, and extend contralateral leg into table. Extend ipsilateral arm into table.
Dr.: Brace anterior ipsilateral humerus and with distal humerus contact, flex arm. The test may be reversed by extending ipsilateral humerus and extending contralateral femur, while bracing ipsilateral leg.

Diagnostic Preparation For Gait Correction

1. The gait reflex point should therapy localize (T.L.) in the clear.
2. The gait reflex should be a non- respiratory assisted lesion, (N.R.L.).
3. Use the gait test for verification.
4. If an N.R.L. gait reflex is not found:
   a) Check the clearing technique procedures
   b) Check for structural aberration
   c) Check for nutritional imbalance
5. Following correction of other factors, recheck gait mechanism to find N.R.L. lesion.

Procedure For Correction

1. Correction consists of using synchronal pulsation technique between foot and contralateral hand reflex.
2. Have patient swallow frequently during pulsation technique.
3. Have patient rotate head first to the right and then to the left. Whichever position yields strength upon muscle testing (negates positive T.L. to gait point) is to be maintained during treatment. (See fig. below).



CLOCAL SYNCHRONIZATION REFLEX TECHNIQUE

In 1976 George Goodheart, D.C., introduced the cloacal mechanism to practicing Applied Kinesiologists and other professionals. His Research Tape No. 33 identifies the history and development of the cloacal reflexes (1¬4). The tape also includes discussions of tonic neck reflexes, labyrinthine reflexes and visual righting reflexes. These reflexes are referred to as the "Cloacal Synchronization Technique."

HISTORY

The therapeutic benefit of stimulating cloacal reflexes rests upon a solid foundation and has s been used extensively in Chiropractic for over forty years. Hurley and Saunders' AQUARIAN AGE HEALING describes the use of a perianal contact. In the late 1940's and early 1950's Dr. Randolph Stone described the use of the perianal contact to correct polarity imbalances between the pelvis, neck and shoulders. Techniques such as Sacro - Occipital, Logan Basic and others have also used the perianal cloacal reflexes. However most of these procedures use only the posterior part of the reflex mechanism. There is also an anterior (perigenital) as well as a posterior (perianal) area of contact in humans, resulting from the fact that the perineum is divided into sexual (genito - urinary) functions and anal functions.

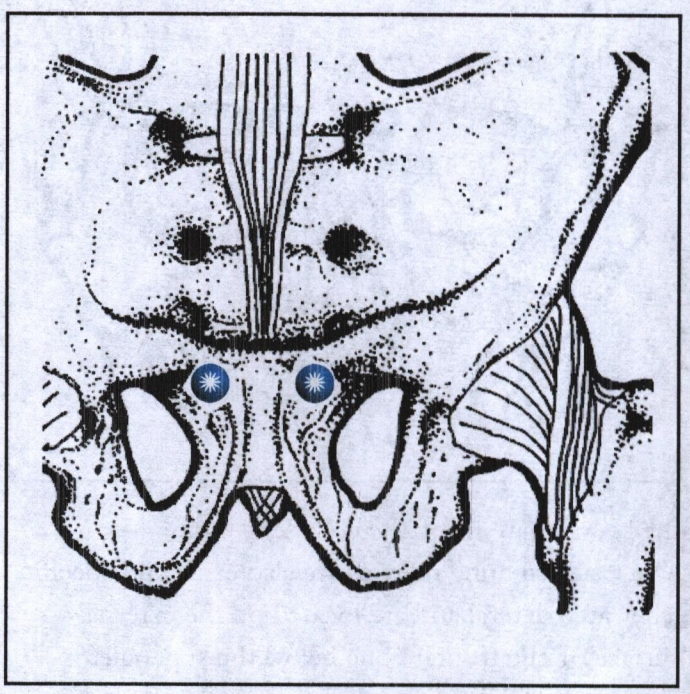
PURPOSE

The cloacal mechanism, the labyrinthine reflexes and the visual righting reflexes have at least three functions: 1) A sexual centering device, 2) A postural balancing mechanism and 3) A system of biomechanical adaptation.

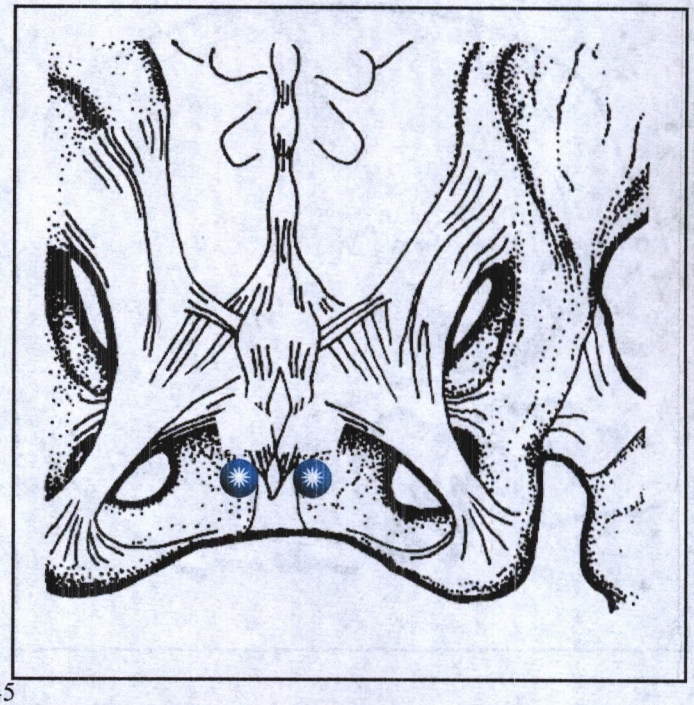
The body can be compared to a battery with opposite poles, the head and the pelvis, having electromagnetic energy flowing between them. Vibrant health is a result of the unimpaired flow of that energy. Using special Kinesiological muscle testing procedures, we can identify aberrations in this energy flow as well as detect improper coordination of these postural centers. These systems may not be disoriented in themselves, but may lack coordination between each other.

LOCATION

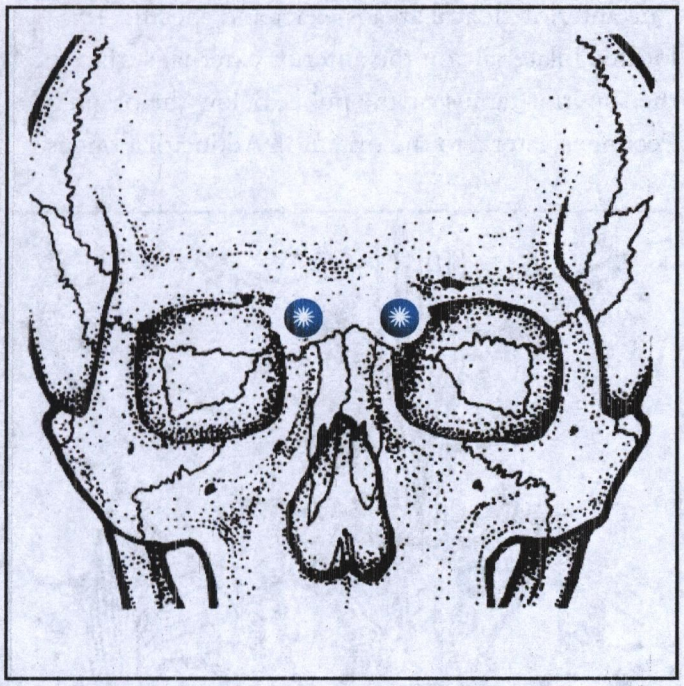
The anterior cloacal area is exact and specific. It is located bilaterally on the anterior external surface of the superior ramus of the pubis, below the origin of Pectineus, lateral to the origin of Adductor Longus



along the superior border of Obturator Foramen. This is palpable as the area just lateral and inferior to the pubic tubercle.

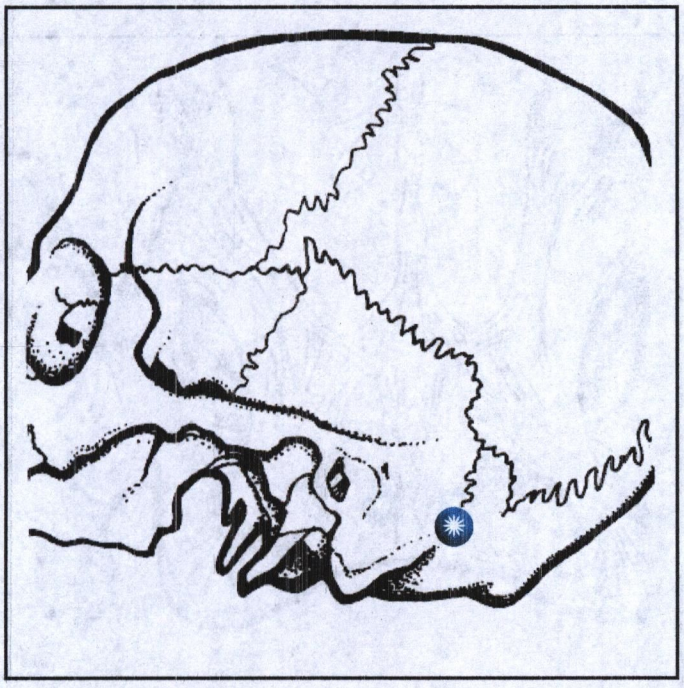


The posterior cloacal reflex is located bilaterally on the sacrotuberous ligament at its attachment to the 4th and 5th transverse tubercles of the sacrum and



the lateral margins of the coccyx.

The visual righting reflexes are also exact and specific. They are bilateral and are located on the external surface of the frontal bone below the superciliary arch on the medial side of the supraorbital notch or foramen in the supraorbital margin. They are lateral to the attachment of the Orbicularis Occu1i.



The labyrinthine reflexes are located bilaterally on the mastoid portion of the temporal bone at the external surface of the mastoid notch or digastric fossa which serves as the attachment for the Digastricus. It is medial to the attachment of the Splenius Capitis and the Longissimus Capitis at the most superior section of that fossa.

Diagnosis

Our method of diagnosing aberrations of these centers in the past has been therapy localization of each of the postural areas, ie:, the cloacal reflexes anteriorly around the Obturator Foramen and posteriorly on the medial lower third of the gluteal area. Specific muscle tests of these centers did not exist. In 1976 and 1980 we devised specific tests for challenging the cloacal synchronization reflexes. These tests measure the coordination between one center and another.

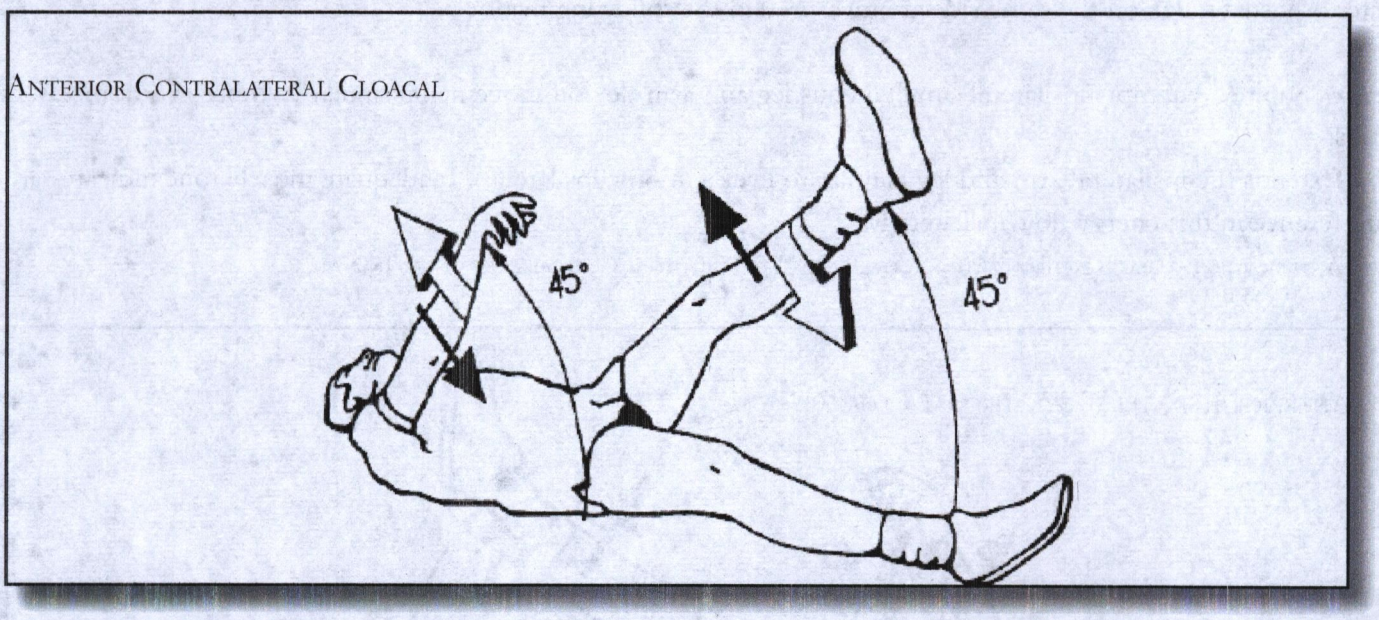
Muscle Challenges For Cloacals

As muscle tone determines posture and the anterior and posterior cloacals labyrinthine and visual righting reflexes are postural in nature, these reflexes must effect specific muscles or muscle groups. If these reflexes are not in proper working order, we should therefore be able to see corresponding muscle aberrations within the framework of the body. These are demonstrated by the following tests.

Cloacal Tests

Anterior Contralateral Appositional Movements

Coordination from the anterior cloacal area to the opposite superciliary ridge controls the muscle groups that are involved in contralateral appositional movements. By testing these muscle groups we can gain significant information about the integrity and coordination of these two reflexes. If a breakdown in communication is suspected, or if it is desired to test the coordination from the right Obturator Foramen with the left visual reflex, it is tested in the following manner:



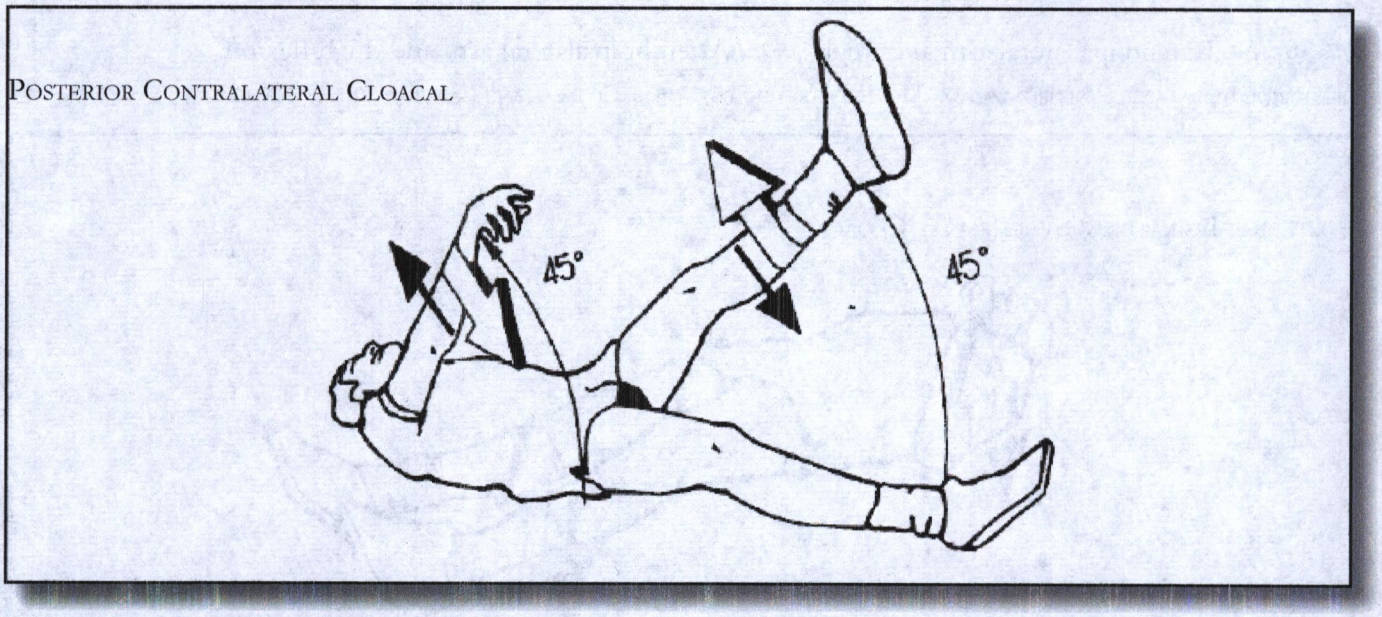
POSTERIOR CONTRALATERAL OPPOSITIONAL MOVEMENTS

The posterior cloacal centers, as they relate to the Opposite labyrinthine centers are measured by the following muscle test:

Patient: Supine. Flex the ipsilateral leg and contralateral arm.

Dr.: Test for a contralateral, oppositional movement by pulling the opposite arm and leg together while the patient attempts oppositional movements. (Arm and leg apart).

KEY: CONTRALATERAL OPPOSITIONAL MOVEMENTS ARE POSTERIOR CONTRALATERAL CLOACAL AND LABYRINTHINE IN NATURE.



Anterior Ipsilateral Synchronal Movements

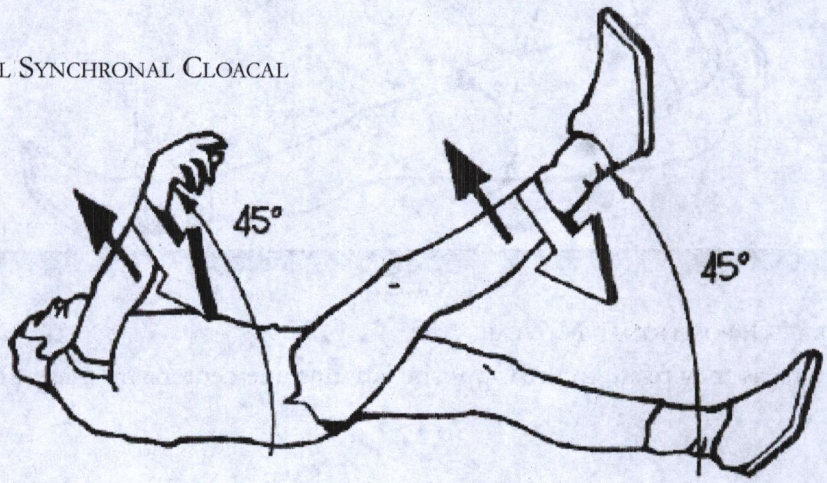
The muscle groups that are involved in the ipsilateral coordination between the anterior cloacal reflex and the anterior visual reflex on the same side are measured in the following manner:

Patient: Supine. Attempts ipsilateral simultaneous leg and arm flexion movements similar to those in a homolateral crawl.

Dr.: Extends the ipsilateral arm and leg (similar to liver gait only ipsilateral). Inadequate muscle tone indicates an interference in this energy flow ipsilaterally.

Key: Anterior Ipsilateral Synchronization Movements Are Ipsilateral Cloacal And Visual In Nature.

Anterior Ipsilateral Synchronal Cloacal



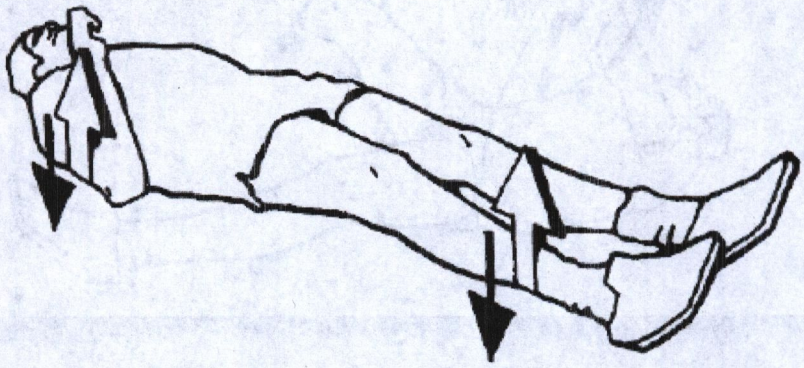
Ipsilateral Posterior Synchronal Movements

Posterior ipsilateral energy between the posterior cloacal reflex and the posterior labyrinthine reflex is measured by the following muscle test:

Patient: Supine. Extend ipsilateral arm and thigh. *Dr.:* Attempt ipsilateral arm and thigh flexion.

Key: posterior Ipsilateral Synchronization Movements Are Ipsilateral Cloacal and Labyrinthine In Nature.

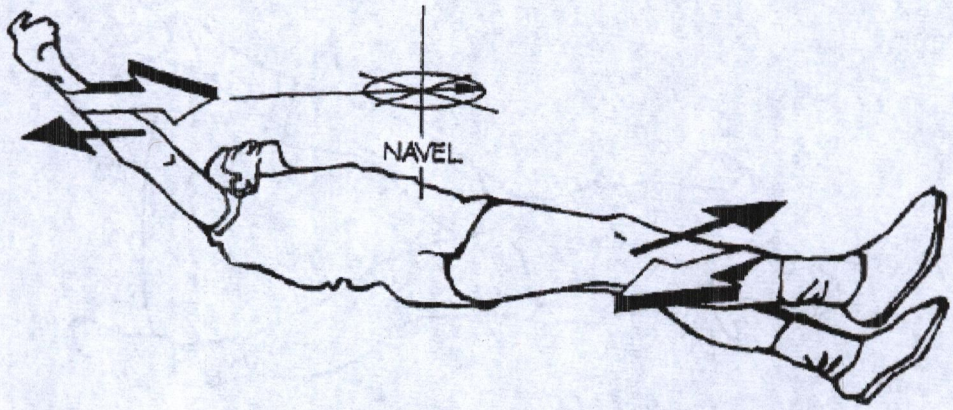
Posterior Ipsilateral Synchronal Cloacal



Anterior To Posterior Ipsilateral Cloacal Synchronization

The muscles that measure anterior cloacals vs labyrinthine centers on the same side are Ipsilateral Adductor Brevis (808) vs Lower Trapezius (404). Test simultaneously or place one in a state of contraction while testing the other.

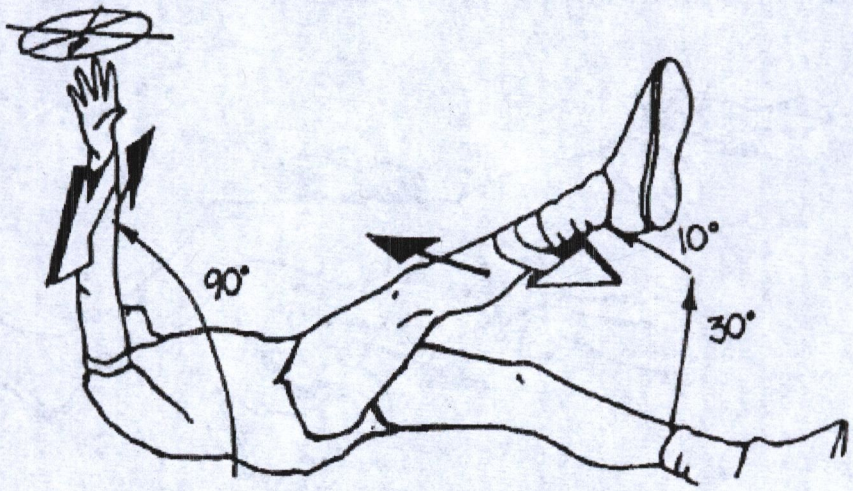
A-P Ipsilateral Cloacal - Adductor Brevis vs Lower Trapezius



Posterior To Anterior Ipsilateral Cloacal Synchronization

The muscles that challenge posterior cloacal vs visual righting centers on the same side are Gluteus Minimus, Anterior Division (786) and Pectoralis Major, Clavicular Division (402). Test simultaneously or place one in a state of contraction while testing the other.

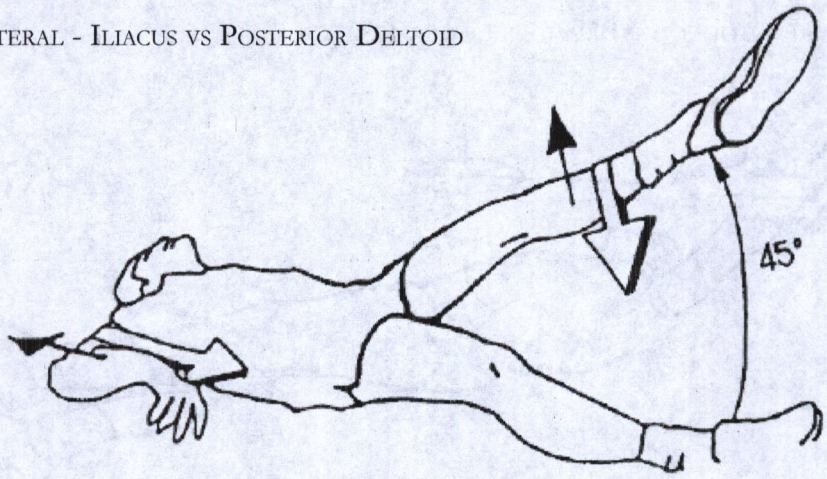
P-A Ipsilateral Cloacal - Gluteus Minimus vs PMC



Anterior To Posterior Contralateral Cloacal Synchronization

The muscles that challenge the anterior cloacals vs the labyrinthine center on the opposite side are Contralateral Iliacus (710) vs Posterior Deltoid (474). Test simultaneously or place one in a state of contraction while testing the other.

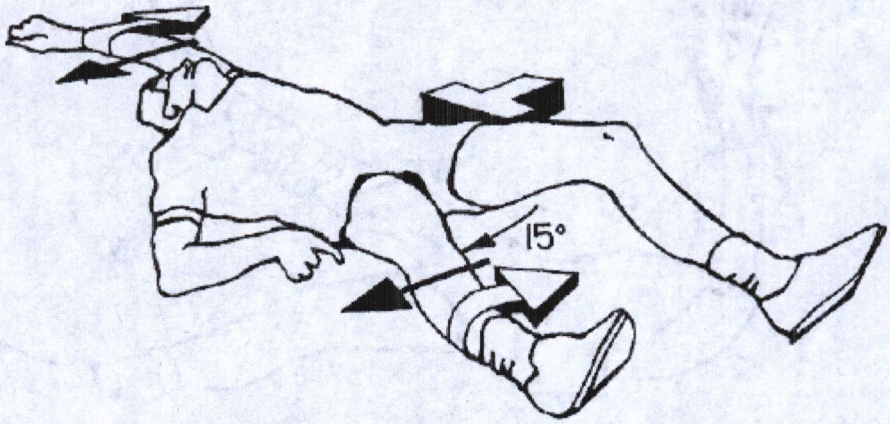
A-P Contralateral - Iliacus vs Posterior Deltoid



Posterior To Anterior Contralateral Cloacal Synchronization

The muscles that challenge the posterior cloacal vs the visual righting centers on the opposite side are Gluteus Medius, Middle Division (782) vs Subclavius (394). Test simultaneously or place one in a state of contraction while testing the other.

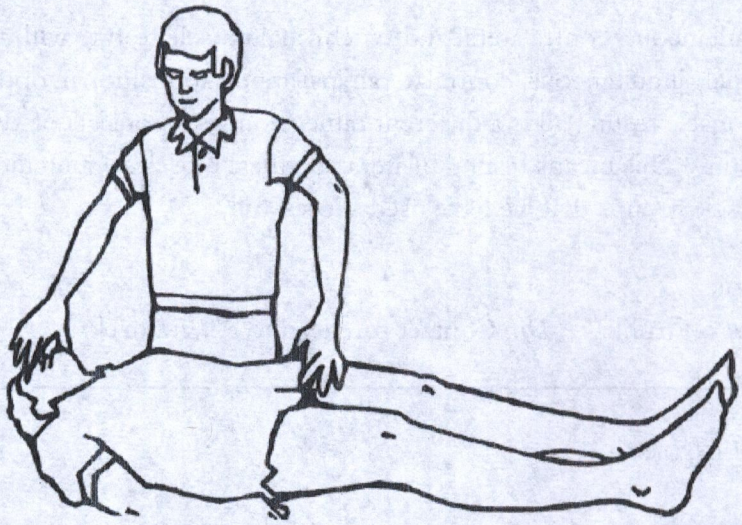
P-A Contralateral Cloacal - Gluteus Medius vs Subclavius



Treatment Of Cloacal Reflexes

The treatment that we have found to be most successful for stabilizing these reflexes is to use a double hand contact between the two areas that have been muscle challenged and found weak. For example, if there is a muscle weakness in the contralateral appositional movement, hold the anterior cloacal and the opposite visual center reflex and wait for synchronous pulsation. We have found in patients with a significant energy loss, such as in MS and other exhaustive chronic disease, the energy levels are extremely poor, and may take two to three minutes to bring the energy into a simultaneous pulsation.

Cloacal Correction



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Group Muscle Test

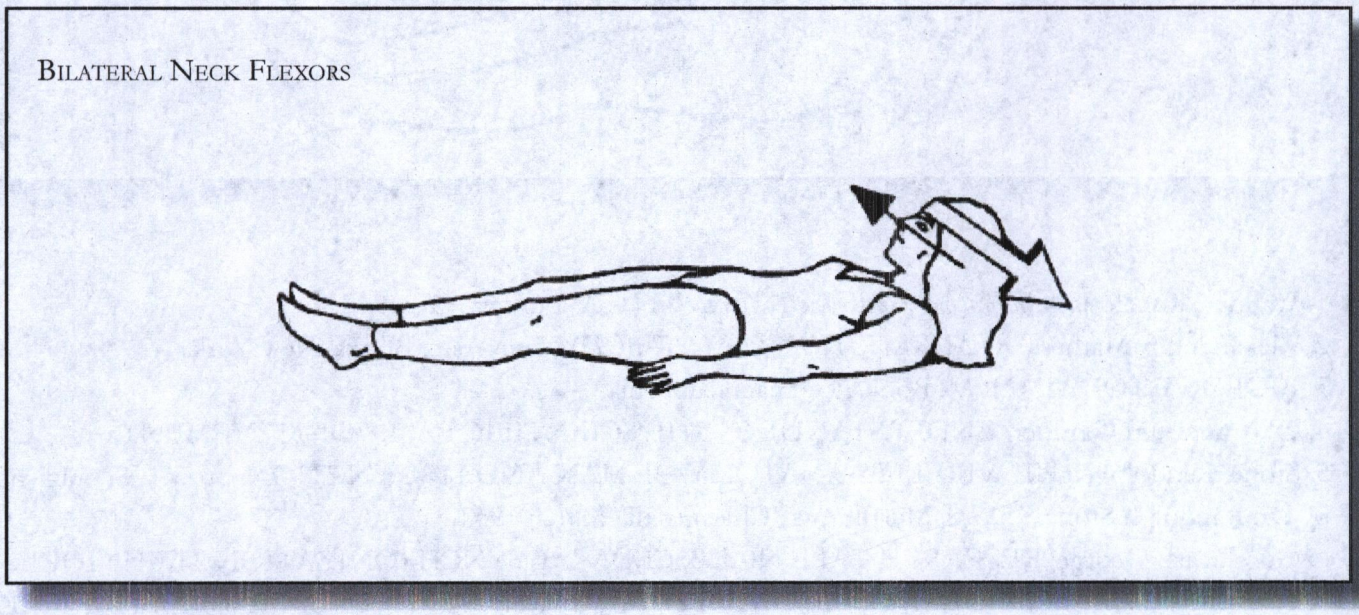
The utilization of muscles for testing purposes has exposed a new area of exploration in the health field. Health is an abundance of vitality which can be readily measured by muscle testing.

Individual or isolated muscle tests dominated the Applied Kinesiology practice until 1974 when Dr. George Goodheart introduced dual simultaneous contralateral muscle testing via the gaits. This concept of muscle testing was again emphasized with the cloacal muscle tests in 1976. In 1982 group muscle tests were demonstrated by Dr.Alan Beardall. Each of these tests provides a different type of challenge to the body systems.

Gait testing is dual, simultaneous, contralateral and synchronal muscle testing with the exception of the kidney gait. Cloacal testing is dual, simultaneous, contralateral, ipsilateral, appositional, oppositional and synchronal muscle testing. Group muscle testing adds a different dimension, as it consists of dual, simultaneous, contralateral, homologous muscle testing. This means testing bilateral identical muscles simultaneously. Listed and demonstrated below are the major muscle groups that we have used successfully.

Bilateral Neck Flexors

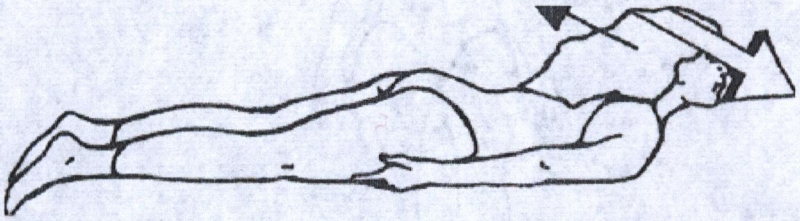
Patient: Supine. Flex neck on trunk.. *Dr.:* Contact forehead to extend neck.



Bilateral Neck Extensors.

Patient: Prone. Extend neck on trunk. *Dr.:* Contact occiput to flex neck on trunk.

Bilateral Neck Extensors

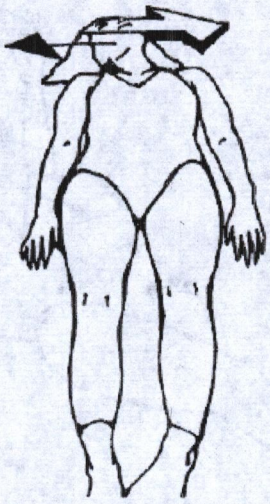


Lateral Neck Flexors - Right And Left.

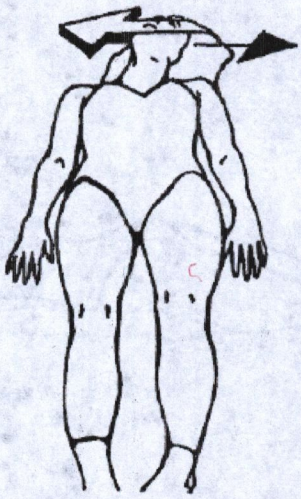
Patient: Supine. Laterally flex neck on trunk.

Dr.: Brace contralateral shoulder and contact ipsilateral temporal area to extend laterally flexed neck on trunk.

Lateral Neck Flexors - Right



Lateral Neck Flexors - Left

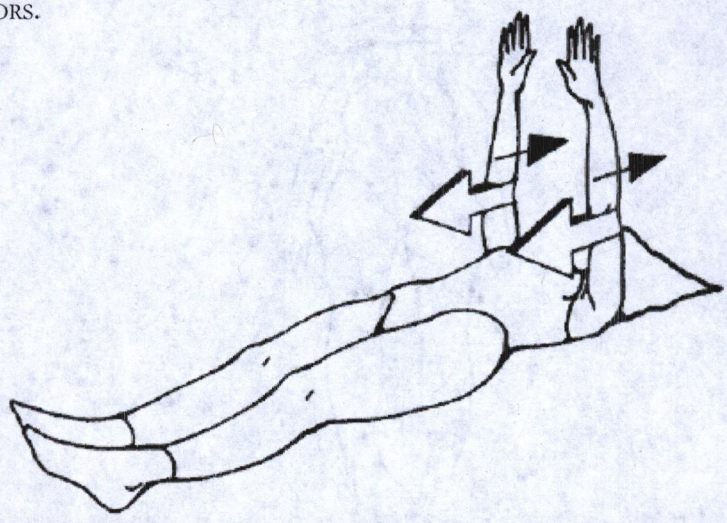


Bilateral Arm Flexors.

Patient: Supine. Flex bilateral arms 90 Degrees

Dr.: Contact forearms and extend arms. This is commonly called the straight arm test.

Bilateral Arm Flexors.

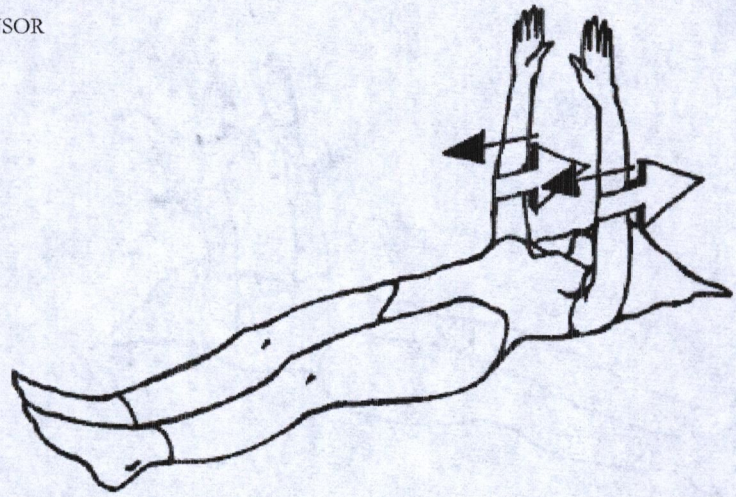


Bilateral Arm Extensor

Patient: Supine. Flex arms 90 degrees. Face palmer surfaces of hands toward feet.

Dr.: Contact elbows to flex arms.

Bilateral Arm Extensor

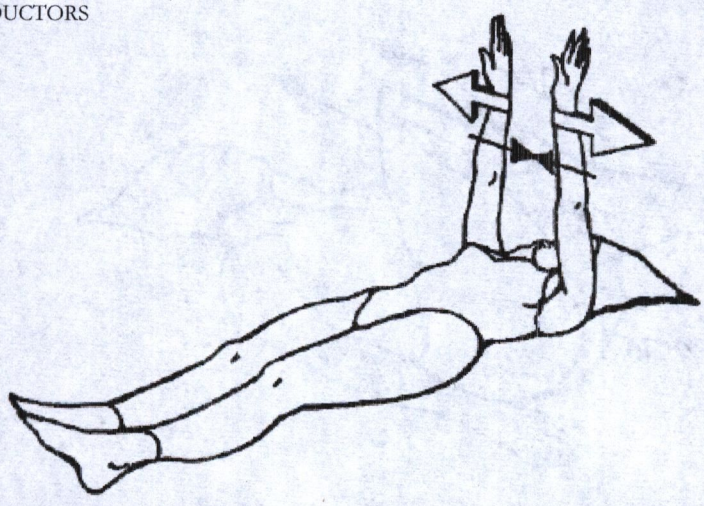


Bilateral Arm Adductors

Patient: Supine. Flex arms 90 degrees with full internal rotation.

Dr.: Contact forearms to abduct arms.

Bilateral Arm Adductors

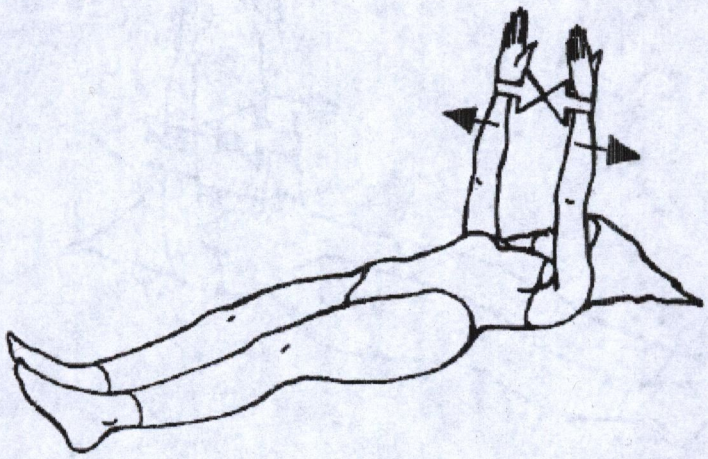


Bilateral Arm Abductor

Patient: Supine. Flex arms 90 degrees. Face palmer surface of hands toward each other.

Dr.: Contact forearms to adduct the arms.

Bilateral Arm Abductor

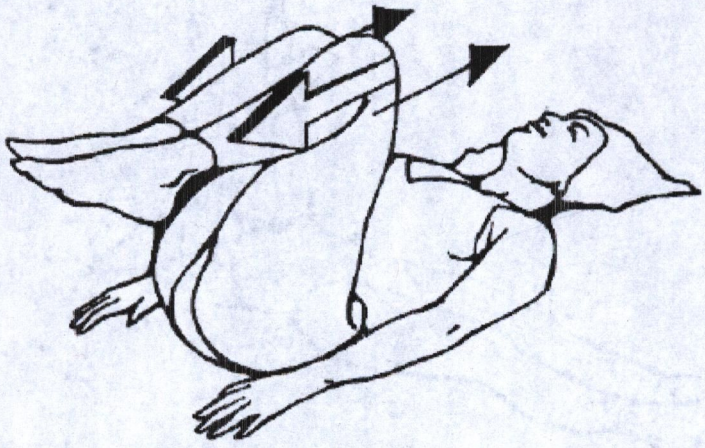


Bilateral Pelvic Flexors

Patient: Supine. With full femur flexion, flex pelvis on trunk.

Dr.: Contact bilateral knee to extend pelvis on trunk.

Bilateral Pelvic Flexors

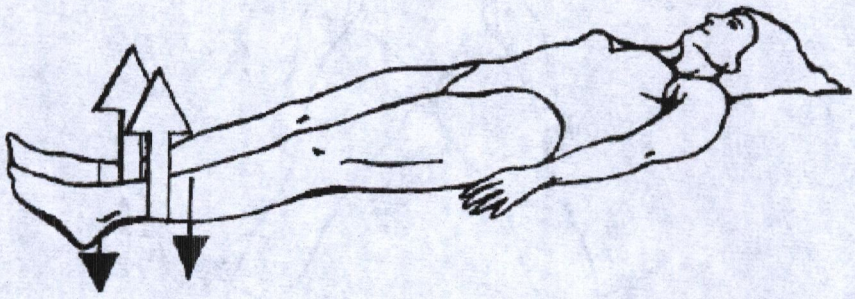


Bilateral Pelvic Extensors

Patient: Supine. With thighs extended on pelvis, extend pelvis on trunk.

Dr.: Contact bilateral ankles to flex pelvis on trunk.

Bilateral Pelvic Extensors

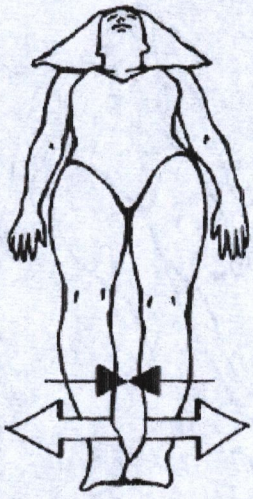


Bilateral Hip Adductors

Patient: Supine. Adduct knees, keep legs extended.

Dr.: Contact medial aspect of ankles, abduct legs bilaterally.

Bilateral Hip Adductors

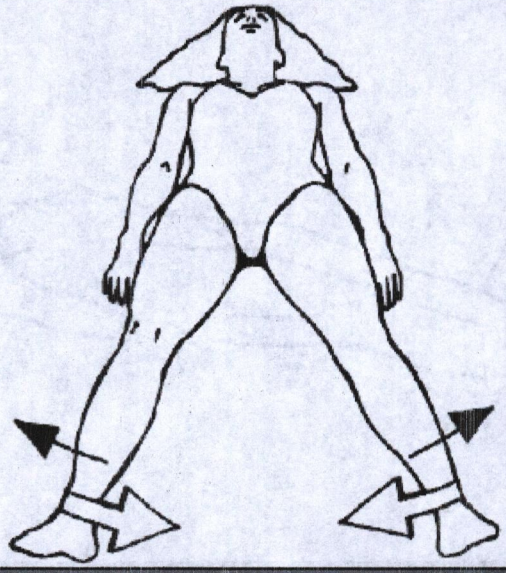


Bilateral Hip Abductors

Patient: Supine. Abduct femur 30 degrees from midline.

Dr.: Contact lateral aspect of ankles, adduct legs bilaterally

Bilateral Hip Abductors

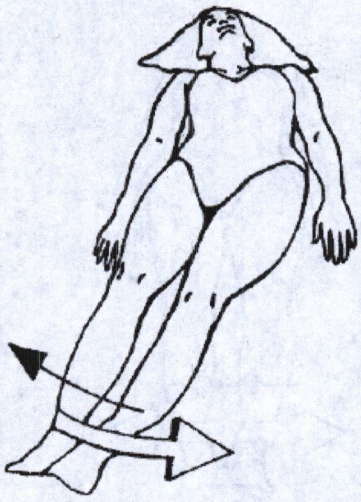


Lateral Pelvic Flexors - Right

Patient: Laterally flex pelvis on trunk as directed.

Dr.: Brace contralateral hip at greater trochanter and contact ipsilateral ankle to extend pelvis on trunk.

Lateral Pelvic Flexors - Right



Lateral Pelvic Flexors - Left

Patient: Laterally flex pelvis on trunk as directed.

Dr.: Brace contralateral hip at greater trochanter and contact ipsilateral ankle to extend pelvis on trunk.

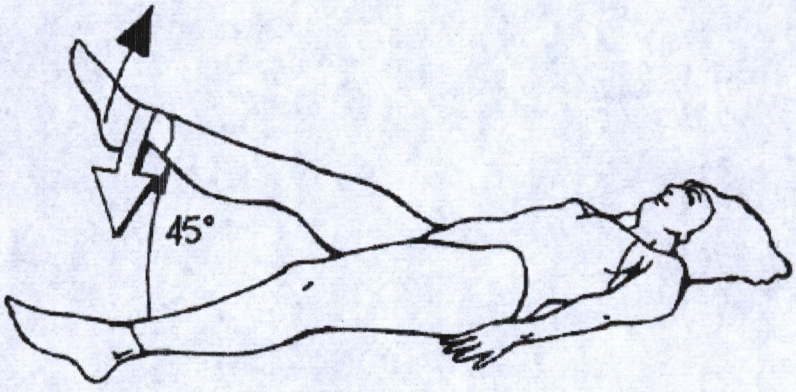
Lateral Pelvic Flexors - Left

Ipsilateral Hip Flexors

Patient: Supine. Flex femur on pelvis.

Dr.: Brace contralateral ankle and contact ipsilateral ankle to extend thigh.

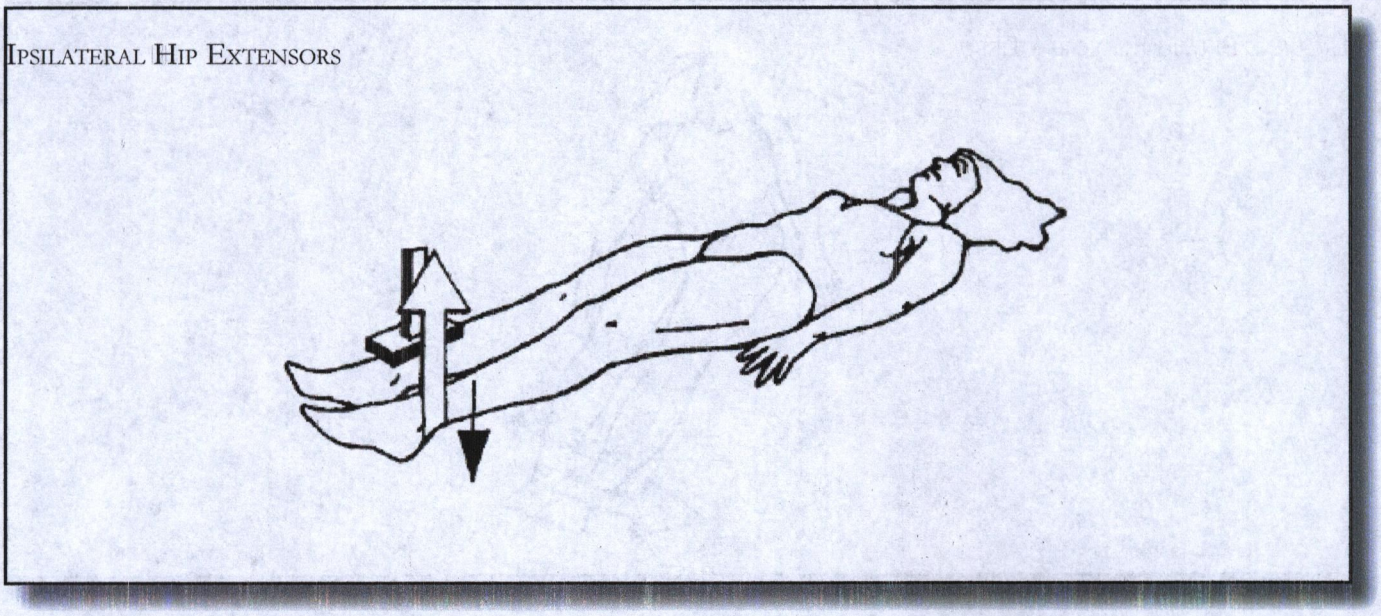
Ipsilateral Hip Flexors



Ipsilateral Hip Extensors

Patient: Supine. Extend femur on pelvis.

Dr.: Brace contralateral ankle, contact ipsilateral ankle to flex thigh.



Chapter IV

The Display

The Rosicrucian Prayer

Not more of Light we ask, 0 God But eyes to see what is;
Not sweeter songs, but ears to hear the present melodies;
Not greater strength, but how to use the power that we possess;
Not more of Love, but skill to turn a frown to a caress;
Not more of joy, but how to feel its kindling presence near,
To give to others all we have
Of courage and of cheer.
No other gift, dear God, we ask, but only sense to see
How best the precious gifts to use we have received from thee.
Give us all fears to dominate, all holy joys to know,
To be the friends we wish to be, to speak the truth we know;
To love the pure, to seek the good, to lift with all our might,
All souls to swell in harmony
In Freedom's perfect light.

THE DISPLAY

Muscles are the display units of the C.P.U. therefore, muscle testing is bio¬computer evaluation. If the testing results are interpreted correctly and the computer is operating in a clear and precise manner adequate insight into body signs, symptoms and language are easily processed into meaningful information.

With this concept in mind, muscle testing takes on a new and exciting importance. The analysis of a muscle must be viewed differently than the initial strategy of Applied Kinesiology. This understanding reflects the ideology of our brilliant leader in the field of Chiropractic, Dr. W.D. Harper, who wrote "Anything Can Cause Anything". Muscle aberrations emanate from four different levels of expression:

1. Local Level. This level is the main concern of Applied Kinesiologists who treat the muscle as a separate unit of the body with specific needs i.e. vascular, lymphatic, acupuncture, etc.

2. Spinal Levels. This computer network can and does have dynamic affects on muscle function. The nervous system is free to utilize the muscle for many things, i.e. shifts in weight bearing, etc.

3. Glandular or Organ Levels. At this level the nervous system can alter muscle tone for purposes intimately related to their specific function.

4. Cerebral Levels. The primary computer can develop specific strat-egies for the organism as a whole utilizing specific muscles. In this chapter we are mainly concerned with the local level of muscle function.

MUSCLE TESTING

Muscle testing is the back bone of the Applied Kinesiologists investigation. The method of diagnosis must be performed with scientific accuracy along with an understanding of the uniqueness of the art of muscle testing.

MUSCLE ISOLATION & TESTING PROCEDURES

The primary prerequisite for muscle testing is knowledge of the anatomy of muscles which includes their origin, insertion, action, and relationship to joints.

The goal is to achieve optimum isolation of muscle fibers with minimum recruitment of adjacent muscles.

Procedure:

1. The body and joints related to the muscle to be tested should be positioned in such a manner as to most efficiently approximate the origin and insertion.
2. Dr.: Place hands in a position that assures adequate stabilization of the patient and support for the test.
3. Dr.: Place the contact hand in a position to most efficiently express the contraction of the muscle.
4. Have the patient resist against the force generated by the tester.
5. The doctor should watch the patient's jaw, eyes and related joints to insure adequate isolation and minimum recruitment.
6. It is important to note the character of muscle contraction.
    a. Normal muscles are quick to react to testing and exhibit a locking quality.
    b. Abnormal muscles are slow or sluggish in the state of contraction. They exhibit a spongy qua¬lity and often break down in contractile quality with repeated testing.
7. Muscles must be tested within the patient's normal resistive capabilities. Overloading the muscle does not elicit a valid test.
8. If the first test is inadequate, repeat. Normal muscle can handle several repeat tests.
9. Timing is an important factor. Let the patient initiate contraction into the Dr.'s hand.

IMPORTANT FACTORS IN MUSCLE TESTING

1. Respiration often affects muscle contraction.

Both the patient and the doctor should be relaxed and not in any specific phase of respiration.

2. Over enthusiasm usually results in operator prejudice.

3. The mental attitude of the doctor is important. A muscle test is an honest investigation with no personal input into the outcome of the test.

4. Inappropriate contacts. Contact and bracing hands should always be comfortable to the patient and Doctor.

5.Pain in related or adjacent joints may impair the muscle test.

6. Poor concentration on the part of the patient may inhibit a proper response.

7. Major muscle or nerve disease may inhibit normal muscle function.

Note: When muscles are tested they display their computer binary quality. This may be absent in certain diseases such as Myasthenia Gravis. The healthier the patient, the more distinct the binary or biphasic quality.

Isolated Versus Group Muscles

An area of criticism that has occurred in Applied Kinesiology is the straight arm test. It has been labeled as "inaccurate" and has been used by many who are not knowledgeable in the science and art of muscle testing. This statement does not address itself to the complexities of the issue.

The first question that should be asked is, "Is the straight arm test inaccurate?" The answer is yes if you are testing the lower Trapezius and no, if you are testing group muscles such as the Shoulder Flexors. The binary computer is capable of expressing itself through isolated muscles as well as group muscles. In fact, group muscles represent a consensus of opinion of an area of the body. A public opinion survey would not be complete with data from a single source. The opinion of numerous people is necessary. A scientific experiment does not draw conclusions from a single experiment.

It appears logical then, that group muscle testing has a certain advantage over isolated muscle testing. To contend that group muscle tests are invalid and isolated muscle tests are accurate is a rule which standard Applied Kinesiologists violate everyday by testing the Quadriceps and Hamstrings. The Hamstring muscle group consists of four isolated muscles: 1. Biceps Femoris, Long Head 2. Biceps Femoris, Short Head 3. Semimembranosus 4. Semitendinosus.

These muscles are frequently used to challenge the pelvis and lumbars for subluxation, etc.. If testing group muscles is invalid, then the challenges for all these tests are also invalid.

The overwhelming conclusion must be that group muscle tests are capable of binary computer function as well as isolated activity. The enormous clinical success using Hamstring muscle group testing provides evidence that the group muscle tests are valid and are here to stay.

In a survey conducted at a seminar of Applied Kinesiologists over 90 percent daily used the "straight arm test" in their practice

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Basic Skills - Therapy Localization

Health practitioners and Chiropractors have used various methods of gathering information from their patients ranging from history taking, physical signs, laboratory, and X-ray analysis to the use of reflex techniques, motion palpation, Iridology and Acupuncture pulse measurements.

In recent years different types of biofeedback mechanisms have been developed which monitor the patient's immediate response to testing procedures. These include electronic instruments such as EKG, GSR, ECG, and vasculizer as well as non-electronic methods such as leg or arm length changes and muscle tone changes.

In Applied and Clinical Kinesiology the system of feedback is known as therapy localization (T.L.). This was discovered by Dr. Goodheart and is a feedback

mechanism of changes in muscle tone - produced by touching the skin at specific areas of the body. It helps to identify the need for therapeutic correction. To T.L. a problem, one must first isolate a strong indicator muscle. Have the patient place the palm of their hand on an area of the body and retest the indicator muscle. If the area has a positive T.L., the previously strong indicator muscle will weaken. In general, T.L. can be used to locate areas of stress but does not tell whether it is a subluxation, organ reflex, neurovascular, neurolymphatic, cranial fault, etc. A more efficient method has been developed to identify specific tissues and that is accomplished by using the hand mode system.

Occasionally there is confusion concerning the terminology "positive T.L.", "negative T.L.", "two-point T.L.", "three-point T.L.", etc. When testing one should keep in mind the basic principle that muscle testing is a binary system of information feedback in an "on" or "off" state.

When isolating a muscle for T.L. the Kinesiologist is attempting to create optimum conditions for the "on" or "off" state. The muscle will register strong (on) or weak (off) when tested. Any area of the body that causes an alteration of tone in the indicator muscle when touched is called a positive T.L. Conversely, when an area of the body is touched and no change in tone occurs, the condition is termed negative T.L.

The mechanics of T.L. can be understood easily by using a system whereby positive is termed "1" and negative is termed "0". Just as a computer indicates "on" or "off" by means of a light, the muscle indicates this by means of altered muscle tone. It is important when testing to know the starting point. If starting from a positive (strong) muscle and therapy localizing a negative area, there will be no change in muscle tone, 1 + 0 = 1 or no change. When starting from a positive muscle and obtaining a positive T.L., the muscle tone will change, (become weak) i.e. 1 + 1 = 2. Another set of possibilities arises when beginning with a negative (weak) muscle. A negative T.L. will add 0 with no change in muscle tone (0 + 0 = 0) and a positive T.L. will add 1 with a change in muscle tone from weakness to strength (0 +1 = 1).

a) Strong muscle + Negative T.L. = No change, or muscle stays strong (+) 1 + (-) 0 = (+) 1.
b) Strong muscle + Positive T.L. = Change or strong muscle goes weak (+) 1 + (+) 1 = (+) 2.
c) Weak muscle + Negative T.L. = No change or muscle stays weak (-) 0 + (-) 0 = (-).
d) Weak muscle + Positive T.L. = change or muscle goes strong (-) 0 + (+) 1 = (=) 1.

Any number of items can be tested to determine if there is a relationship between them. Each positive T.L. will change the tone of the indicator muscle. By knowing the starting point for the system, either strength (+) or weakness (-), one can build an equation or series of one-point, two-point and three-point therapy localizations.

Dr. Goodheart uses special terminology to distinguish between use of the doctor's hand and that of the patient to localize the problem on the patient. It is called Dr.'s T.L. and patient's T.L. At times the use of the doctor's hand is more practical. Our experience has indicated there are distinct conditions under which the doctor's therapy localization and the patient's T.L. will differ. These appear to be electromagnetic energy aberrations which can be minimized by utilizing the clearing techniques discussed in the chapter on clearing techniques.

Muscle Divisions

Included in the Instruction Manual is a list of all the muscles for which research has been completed. This list contains several muscles which have divisions not presently accepted in medical texts. These divisions are an out growth of personal research obtained while observing patients, studying anatomy books and dissecting cadavers.

Some divisions such as the Pectoralis Major, Clavicular Division and the Pectoralis Major, Sternal Division are already familiar. An additional division has been called the Pectoralis Major, Costal Division. These are the fibers that arise from the rib cage,

and are tested differently, and have proven to have different NV, NL, visceral organs etc. The same idea prevails throughout the muscle divisions.

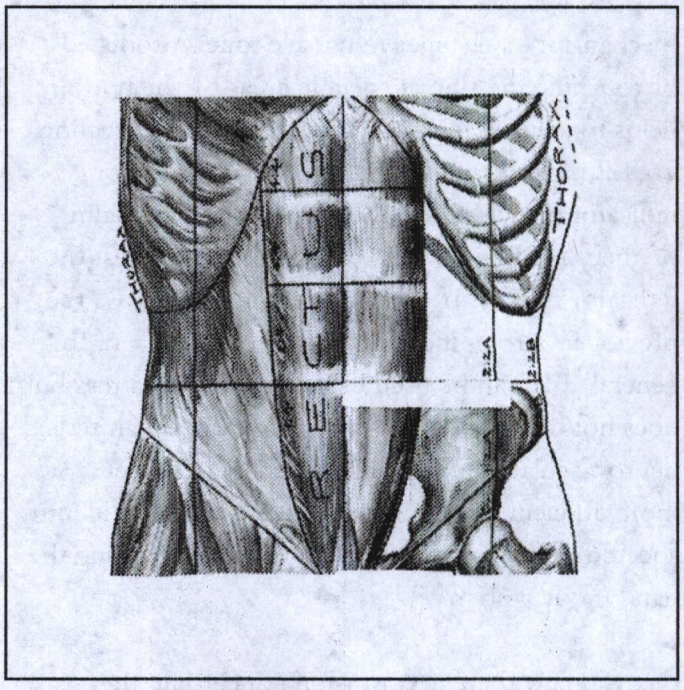
Some divisions are named according to the actions i.e. flexion or abduction. Others are named because of the different origin, i.e. Gluteus Maximus, Iliac Division, Sacral and Coccygeal Division. This first division is named for the fibers which arise from the Ilium, the second for the fibers which arise from the sacrum, etc.

Using Clinical Kinesiology Workbooks

The Clinical Kinesiology workbooks cover the specific information necessary to test and evaluate over 300 muscles. Each workbook covers sections of the body and is a regional atlas of specific muscle tests and reflexes. One chapter gives an integrated view of the muscle reflexes displayed on cranial, full body, and skeletal drawings. Another chapter contains the muscle worksheets for each muscle discussed in that area of the body. Another chapter lists the reactive muscles associated with those muscles covered in the workbook.

The composite drawings show all the reflexes in that particular section of the body so that relationships between the muscles discussed and other functions can be seen. These relationships are useful to identify and correlate the appropriate muscle circuit when a patient complains of a pain in a particular area. Refer to the drawings to see if a reflex point is listed in the area of complaint. Cranial views display the location of the neurovascular points used. Illustrations depicting the neurolymphatic and other points for the lower half and upper half of the body follow. Points located on muscular tissue are located on the tissue, whereas points located deeper near skeletal structures are shown on the bone part of the illustration.

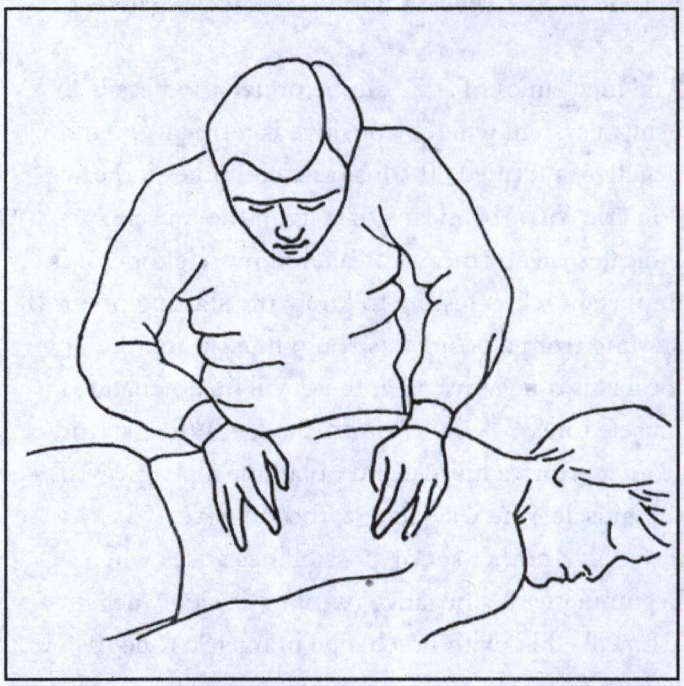
The major and most important portion of the workbook is the muscle worksheet. Each muscle is presented in a structured format to provide the necessary information to properly test and evaluate possible functions. The information is displayed

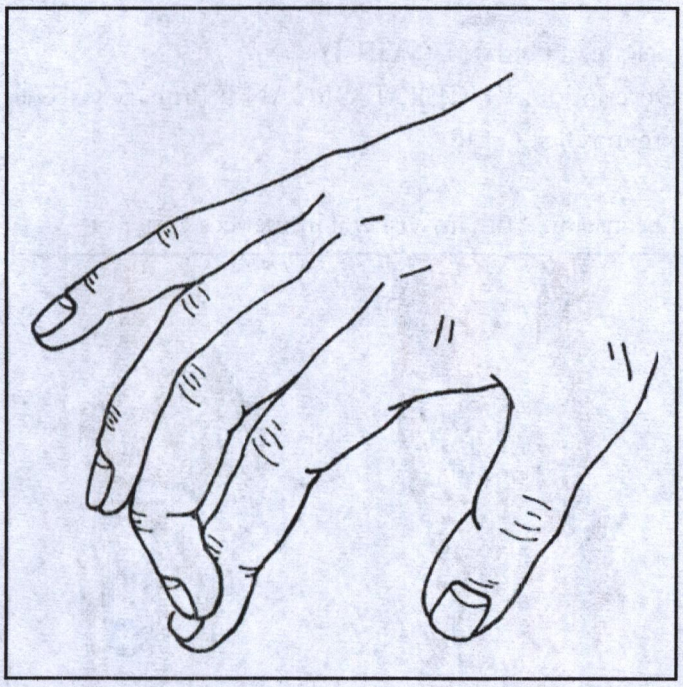


on seven pictorial drawings which include a word description to properly identify the related local joint reflexes. The meaning conveyed by each category is as follows:

ORIGIN: Indicates the area where the muscle origin is most effectively treated and will sometimes vary from the description commonly found in anatomy texts.

INSERTION: Indicates the area where the muscle insertion is most effectively treated. (See fig. below)





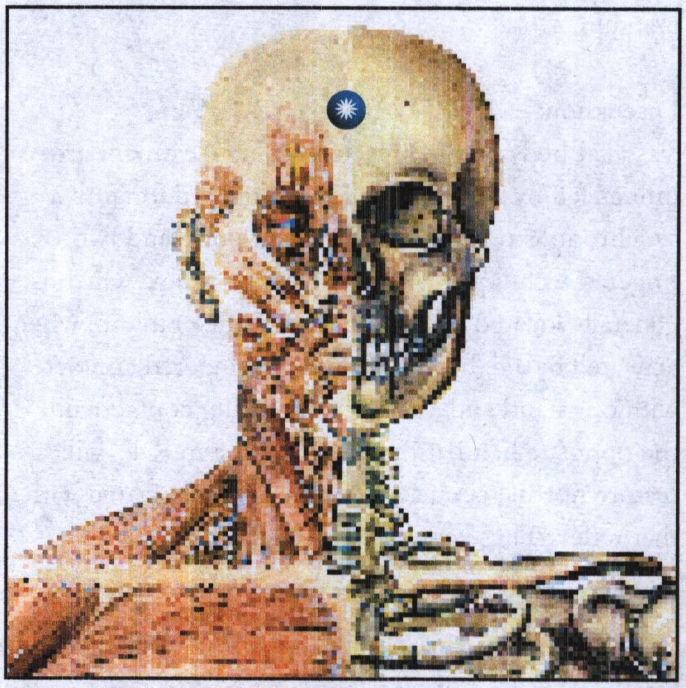
TEST: Describes the test position found to be most practical and efficient in isolating a particular muscle division weakness. Pt. refers to the patient in the description, Dr. refers to the doctor (or one performing the test). Ipsilateral refers to the muscle being tested on the same side of the body, whereas, contralateral refers to the side of the body opposite to the muscle being tested. "Brace" refers to the area being held by the doctor to stabilize the patient for testing and "contact" refers to the area contacted by the doctor in order to test for muscle contraction.

Procedure For Muscle Correction
Synchronous Pulse and Double-Fingered Contact.

Based upon clinical experience over many years and trial and error testing of many techniques, certain procedures have remained dominant as being most effective when treating a muscle on a local basis. This procedure is the use of a double-fingered bilateral contact. (see diag.). The contact is held until a synchronal pulse is felt.

While stimulating any reflex point on the body, always use a two-fingered contact. (see diag.) This is a neutral contact as opposed to a positive or negative single finger contact.

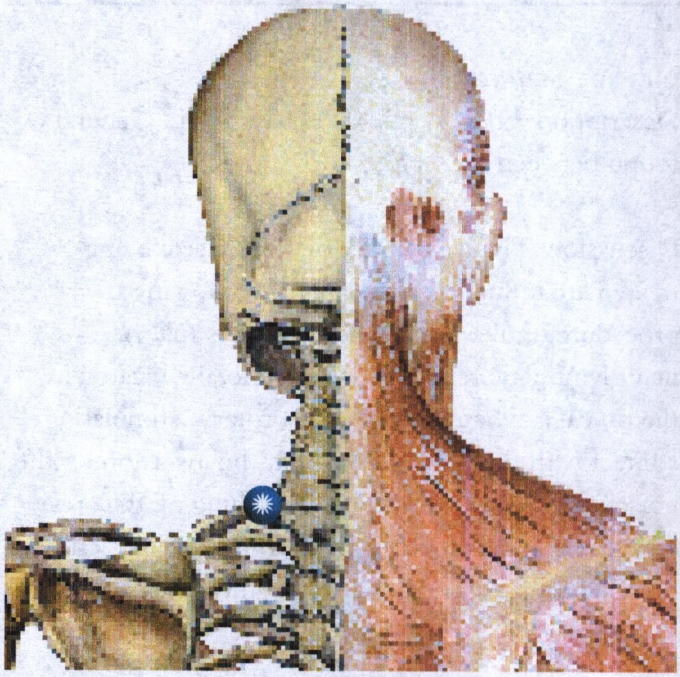
Procedure for Muscle Correction



On a local basis a muscle is directly influenced by one or more of the following factors:

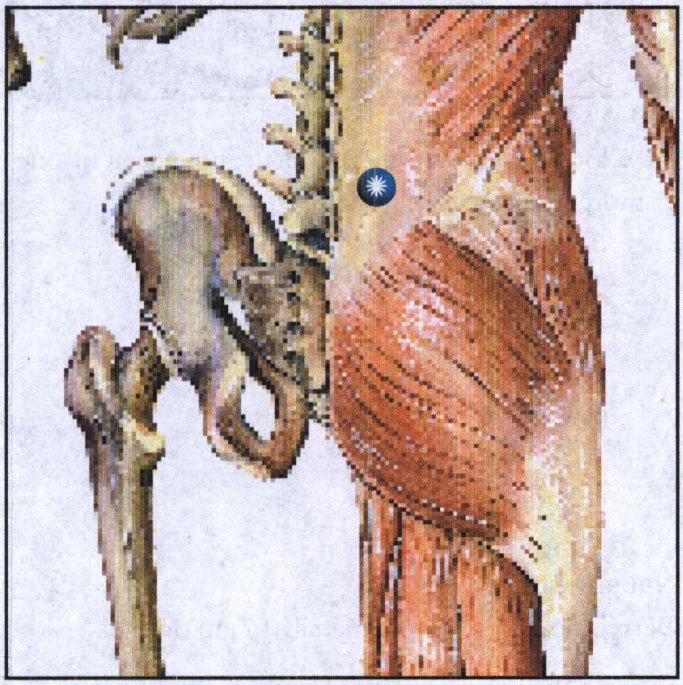
2. Neurovascular
3. Neurolymphatic
4. Visceral Organ Reflex
5. Muscle Acupuncture Point
6. Vertebral Level and Myomere
7. Cranial
8. Nutrition

Neurovascular
Description: NV Point generally found on the



cranium.

Discussion: NEUROVASCULAR (NV):
Vascular beds of the muscle needing treatment are influenced by using the following procedure until a synchronous pulse is felt. (See syn. pulse and two-fingered technique). A neurovascular reflex, which is generally located on the surface of the cranium, when activated by a light tugging double-fingered contact with one hand and a rotary stimulating contact with the opposite hand at the origin of the muscle, will restore normal circulation to the area associated with that reflex. These contacts are ipsilateral.

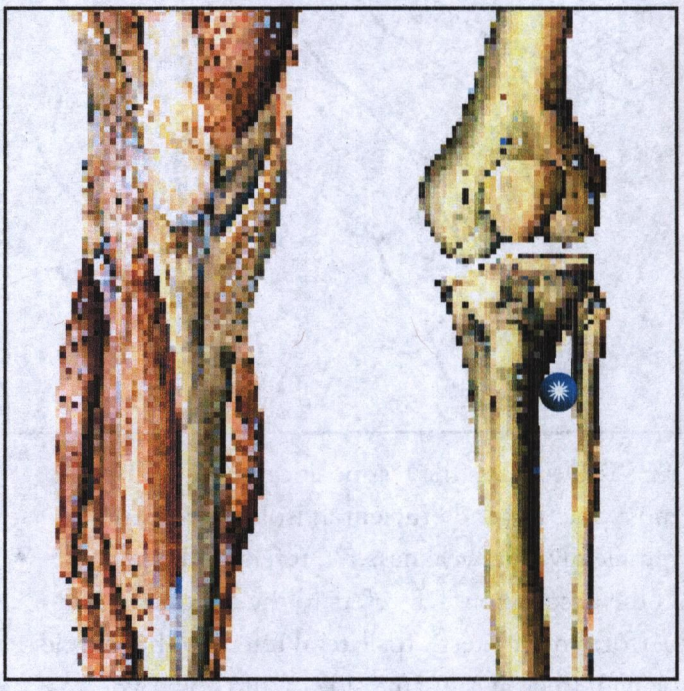


NEUROLYMPHATIC
Description: NEUROLYMPHATIC: NL. Generally found between the ribs.

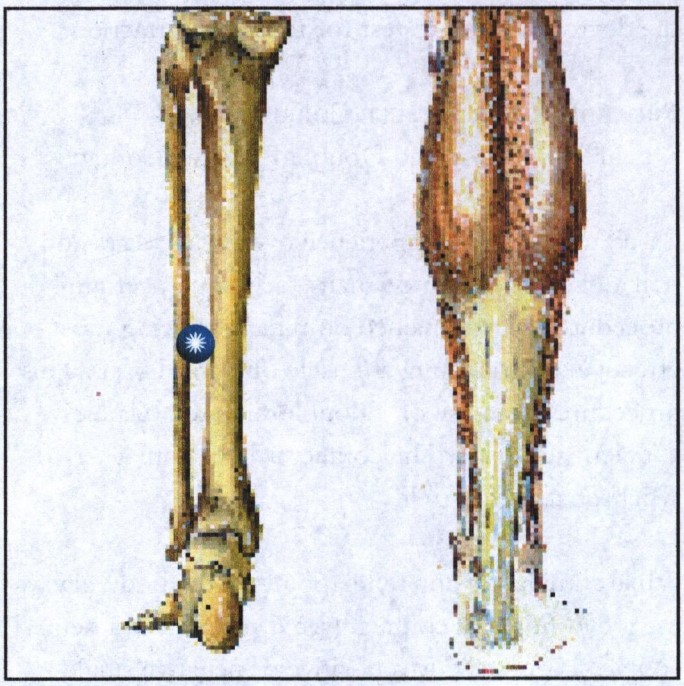
Discussion: The lymphatics of the muscle being treated are influenced by using the following procedure until a synchronous pulse is felt. A neurolymphatic reflex, which is generally located in the rib cage, when activated by a rotary- stimulating contact with the opposite hand at the insertion of the muscle, will produce lymphatic flushing of the areas associated with that reflex. Both the right and left muscle group are treated by using the same reflex.

VISCERAL ORGAN I (VOR-I)
Description: VISCERAL ORGAN I: Primary visceral organ reflex (VOR-I)

Discussion: Somato-visceral influences and



viscero-somatic reflexes are common feedback systems with the local computer. A muscle is primarily associated with two specific organs. They are listed as Visceral Organ I (VORI) and Visceral Organ II



(VORII) and are treated as follows:

A VOR, which is generally located on the abdomen

or other specific areas of the body, when activated by a rotary stimulating contact with one hand and a rotary stimulating contact with the opposite hand on the Muscle Acupuncture Point, will restore normal interaction between somato¬visceral and viscero-somatic functions of the body. Following stimulation hold until a synchronous pulse is detected.

Visceral Organ II (VOR-II)

Description: VISCERAL ORGAN II:
Secondary visceral organ reflex (VORII)
Discussion: (VOR I)

Muscle Acupuncture Point (M.A.P.)

Description: M.A.P.: The muscle Acupuncture Point is a specific reflex for the muscle being tested and is located contralateral to the muscle being tested.

Discussion: Each muscle has a specific acupuncture point located on the opposite side, which acts as an energizer and a point of circuitry overload, located within or around the normal acupuncture points as previously described by Felix Mann. (For treatment procedure of the MAP see VOR reflex treatment above).

VERTEBRAL LEVEL (VL) and MYOMERE (MM): There are two primary areas of neurological input from the spinal cord to each muscle. The first area is called the myomere and reflects areas of normal neurological innervation to a specific muscle. The vertebral level is a phenomenon not clearly understood but is frequently found associated with each muscle aberration. When either of these levels two-point with an NRL, adjust the area as indicated and tap for recall. Occasionally it is necessary to pulse the MM or VL or both to the muscle.
CRANIAL: Related extraspinal subluxation that occurs as a compensatory involvement in muscle aberration.FOOT: Related extraspinal subluxation that occurs as a compensatory involvement in muscle aberration.

NUTRITION: Each muscle has a specific nutrient associated with it. Nutrition is indicated when the NL point is NOT an NRL and the insertion of the muscle IS AN NRL.

Priority Treatment

1. Test and record all weak muscles.
2. Use computer clearout technique (see section on Clearing Techniques).
3. Retest the muscles to determine which one remained weak.
4. The weak muscle is considered a ONE-POINT.
5. Mark the major reflexes associated with the muscle: NV, NL, VORI, VORII, VL, MM, Cranial, Foot.
6. Have the patient therapy localize (TL) each reflex point while testing the muscle. The reflex that causes the weak muscle to become strong is considered the TWO- POINT.
7. Check the TWO-POINT reflex to make sure it is an NRL.
8. Treat the reflex that is the NRL in the appropriate manner. (See procedure for muscle correction).
    - NV - Origin
    - NL - Insertion
    - MAP – VOR I
    - MAP - VOR II
    - MAP- Muscle
    - VL - Adjust, then pulse to MM MM - Adjust, then pulse to VL
    - Cranial
    - Foot
9. If two reflex points are indicated as NRL's, use the THREE-POINT technique. The three point technique helps to determine which of the major reflexes is to be treated. The procedure is as follows:
    a) The weak muscle is the ONE- POINT.
    b) The reflex point that strengthens the muscle is the TWO-POINT.
    c) While the patient TL's the reflex point that strengthened the weak muscle, if any other reflex point changes the indicator muscle, it is considered the THREE POINT and the major point to be treated.

CHAPTER VI

CROSS REFERENCE

Organ-Muscle Relationships

Adenoids

526 Extensor Pollicis Brevis Septal Div.
932 Abductor Hallucis, Oblique Head, Peroneus Division

Adrenal

114 Masseter Superficial Div.
302 Sternothyroideus
326 Splenius Cervicis
456 Deltoideus Anterior Scapular Div.
484 Pronator Teres Humeral Div.
504 Flexor Carpi Radialis Flexor Div.
534 Flexor Pollicis Brevis
582 Abductor Digiti Minimi Manus, Flexor Div.
614 Longissimus Thoracis Upper Lumbar Div.
700 Rectus Abdominis First Div.
726 Psoas Major Diaphragmatic Div.
808 Gracilis
810 Sartorius
818 Vastus Medialis Middle Div.
840 Articularis Genu
854 Semitendinosis
856 Semimembranosis Tibial Div.
878 Soleus Medial Div.
968 Abductor Digitus Pedis Third

Anterior Pituitary

100 Orbicularis Oris Lower Div.
314 Longus Capitis
322 Splenius Capitis Mastoid Div.
422 Supraspinatus Fossa Div.
464 Pectoralis Major Costal Div.
520 Extensor Pollicis Longus Ulnar Div.
546 Adductor Pollicis Obliquus
558 Flexor Digitorum Superficialis Lateral Div.
570 Interossei Dorsales Manus First
844 Adductor Magnus Oblique Div.
878 Soleus Medial Div.
900 Flexor Hallucis Longus Tibial Div.
904 Extensor Hallucis Longus Interosseous Div.
908 Flexor Digitorum Longus Medial Div.
910 Flexor Digitorum Longus Lateral Div.
920 Adductor Hallucis Superior Div.

Bladder

278 Scalenus Anterior
290 Digastricus Anterior Belly Div.
296 Mylohyoideus
392 Trapezius Lower Div.
446 Coracobrachialis Septal Div.
476 Articularis Cubiti
488 Anconeus Olecranon Div.
536 Interossei Pollicis (Palmaris First)
560 Flexor Digitorum Profundus Manus Medial Div.
570 Interossei Dorsales Manus First
610 Spinalis Thoracis Lumbar Div.
648 Serratus Posterior Superior Div.
690 Pyramidalis
708 Rectus Abdominis Fourth Div. Lateralis
726 Psoas Major Diaphragmatic Div.
842 Adductor Magnus Vertical Div.
852 Gluteus Maximus Coccygeal Div.
886 Peroneus Longus Cuneiform Div.
892 Peroneus Brevis Septal Div.
894 Peroneus Tertius
960 Adductor Digitus Pedis Third

Broad Ligament

844 Adductor Magnus Oblique Div.

Colon (Ascending/Descending)

270 Upper Trapezius Scapular Div.
350 Interspinalis Cervicis
450 Deltoideus Posterior Lateral Div.
510 Extensor Carpi Ulnaris Adductor Div.
692 Obliquus Externus Abdominis Anterior Div.
700 Rectus Abdominis First Div.
710 Iliacus
730 Quadratus Lumborurn Costal Div.
790 Tensor Fascia Lata Anterior Div.
824 Biceps Femoris Shorthead
826 Biceps Femoris Longhead Fibular Div.
874 Gastrocnemius Lateral Div.
948 Flexor Digitorum Brevis Lateral Div.

Colon (Rectal Area)

288 Platysma Posterior Div.
722 Psoas Major Lumbar Div.
852 Gluteus Maximus Coccygeal Div.
880 Soleus Lateral Div.
938 Abductor Hallucis Transverse Head Lateral Div.

Colon (Sigmoid)

468 Biceps Brachii Shorthead
642 Levatores Costarum Lower Div.
734 Multifidus Lumbosacral Div.

Colon (Transverse)

058 Levator Palpebrae Superioris
102 Buccinator
418 Latissimus Dorsi Iliac Div.
798 Pectineus

Colon (Hepatic and Splenic Flexure)

696 Obliquus Internus Abdominis Anterior Div.

Ductus Deferens

070 Depressor Septi Nasi
278 Scalenus Anterior
506 Flexor Carpi Ulnaris Flexor Div.
548 Extensor Digitorum Communis Manus Medial Div.
734 Multifidus Lumbosacral Div.
898 Tibialis Anterior Dorsiflexor Div.
946 Flexor Digitorum. Brevis Medial Div.

Duodenum

872 Gastrocnemius, Medial Division
886 Peroneus Longus, Cuneiform Division

Duodenum (Horizontal Portion)

702 Rectus Abdominis Second Div.

Duodenum (Ascending Portion)

706 Rectus Abdominis Fourth Div. Medialis

Duodenum (Descending Portion)

286 Platysma Anterior Div.
718 Transverse Abdominis Lower Div.

Duodenum (Special Cells)

514 Extensor Carpi Radialis Brevis
816 Vastus Medialis Upper Div
872 Gastrocnemius, Medial Div
886 Peroneus Longus, Cuneiform Div.

Duodenum (Superior Portion)

470 Triceps Longhead

Duodenum (L-Jejunum Junction; R-Ampuila of Vater)

800 Adductor Brevis

Ear (External)

410 Subclavius Clavicular Div.
432 Teres Major Superior Div.
952 Flexor Digitus Pedis Third

Ear (Internal)

060 Orbicularis Occuli Upper Div.
272 Upper Trapezius Clavicular Div
390 Trapezius Middle Div
492 Supinator Radial Div.

Epididymis

522 Extensor Pollicus Longus Septal Div.
864 Gemellus Superior

Esophagus

422 Supraspinatus Fossa Div
440 Subscapularis Second Div.
502 Flexor Carpi Radialis Abductor Div.
566 Interossei Dorsales Manus Third
706 Rectus Abdominis Fourth Div. Medialis
902 Flexor Hallucis Longus Fibular Div.

Eustachian Tube

470 Triceps Longhead
496 Pronator Quadratus Proximal Div.
790 Tensor Fascia Lata Anterior Div.
824 Biceps Femoris Shorthead

Eye

270 Upper Trapezius Scapular Div.
298 Geniohyoideus
306 Omohyoideus
426 Infraspinatus Middle Div.
450 Deltoideus Posterior Lateral Div.
696 Obliquus Internus Abdominis Anterior Div.
704 Rectus Abdominis Third Div.
738 Longissimus Lumborum
800 Adductor Brevis
958 Adductor Digitus Pedis Second
962 Adductor Digitus Pedis Fourth

Gallbladder

098 Orbicularis Oris Upper Div.
274 Sternocleidomastoid Sternal Div.
282 Scalenus Medius
292 Digastricus Posterior Belly Div.
426 Infraspinatus Middle Div.
454 Deltoideus Middle Anterior Div.
472 Triceps Lateral Head
502 Flexor Carpi Radialis Abductor Div.
596 Palmaris Brevis
642 Levatores Costarum Lower Div.
732 Quadratus Lumborum Lumbar Div.
818 Vastus Medialis Middle Div.
870 Popliteus
888 Peroneus Longus Metatarsal Div.

Gallbladder Duct System

052 Occipitalis
134 Rectus Medialis Bulbi
300 Sternohyoideus
428 Infraspinatus Inferior Division
520 Extensor Pollicis Longus Ulnar Div.
524 Extensor Pollicis Brevis, Radial Div.
542 Abductor Pollicis Brevis

Gonads

100 Orbicularis Oris Lower Div.
102 Buccinator
124 Pterygoideus Lateralis (Ext.) Upper Div.-Disc
126 Pterygoideus Lateralis (Ext.) Lower Div.
308 Longus Colli Vertical Div.
402 Serratus Anterior Superior Div.
430 Teres Minor
468 Biceps Brachii Shorthead
480 Brachioradialis Humeral Div.
492 Supinator Radial Div.
538 Opponens Pollicis Flexor Div.
592 Interossei Palmares Third
784 Gluteus Medius Anterior Div.
806 Adductor Longus Superior Div.
840 Articularis Genu
860 Piriformis

Heart

326 Splenius Cervicis
406 Pectoralis Minor Superior Div.
436 Subscapularis Superior Div.
440 Subscapularis Second Div.
460 Pectoralis Major Clavicular Div.
488 Anconeus Olecranon Div.
544 Adductor Pollicis Transversus
564 Interossei Dorsales Manus Fourth
610 Spinalis Thoracis Lumbar Div.
612 Spinalis Thoracis Thoracic Div.
656 Diaphram Number One Right Side Lumbar Div.
744 Pubococcygeus
812 Obturator Externus
864 Gemellus Superior
884 Tibialis Posterior Fibular Div.
906 Extensor Hallucis Longus Fibular Div.
912 Extensor Digitorum Longus Medial Div.
922 Adductor Hallucis Inferior Div.

Ileum

506	Flexor Carpi Ulnaris Flexor Div.
544	Adductor Pollicis Transversus
704	Rectus Abdominis Third Div.
740	Coccygeus Sacral Div.
804	Adductor Longus Inferior Div.
820	Vastus Medialis Lower Div.
834	Vastus Lateralis Lower Div.
836	Vastus Intermedius Medial Div.
882	Tibialis Posterior Tibial Div.
936	Abductor Hallucis Transverse Head Medial Div.

Ileum (Special Cells)

480	Brachioradialis Humeral Div.
584	Abductor Digiti Minimi Manus Abductor Div.
594	Interossei Palmares Second
858	Semimembranosis Popliteal Div.

Jejunum

478	Brachialis
562	Flexor Digitorum Profundus Manus Lateral Div.
586	Opponens Digiti Minimi Manus
652	Serratus Posterior Inferior Div.
738	Longissimus Lumborum
796	Rectus Femoris Straight Head
876	Plantaris
896	Tibialis Anterior Supinator Div.
930	Flexor Hallucis Brevis Cuboid Div.
940	Extensor Hallucis Brevis

Jejunum (Special Cells)

308	Longus Colli Vertical Div.

KIDNEY

130	Rectus Superior Bulbi
284	Scalenus Posterior
302	Sternothyroideus
392	Trapezius Lower Div.
408	Pectoralis Minor Inferior Div.
444	Coracobrachialis Coracoid Div.
466	Biceps Brachii Longhead
482	Brachioradialis Septal Div.
486	Pronator Teres Ulnar Div.
498	Pronator Quadratus Distal Div.
500	Palmaris Longus
512	Extensor Carpi Ulnaris Extensor Div.
516	Extensor Carpi Radialis Longus Extensor Div.
554	Extensor Indicis Proprius
712	Iliacus Minor
722	Psoas Major Lumbar Div.
724	Psoas Major Thoracic Div.
872	Gastrocnemius Medial Div.
902	Flexor Hallucis Longus Fibular Div.
910	Flexor Digitorum Longus Lateral Div.
952	Flexor Digitus Pedis Third

LARYNX

276	Sternocleidomastoid Clavicular Div.
590	Interossei Palmares Fourth
822	Obturator Internus
944	Quadratus Plantae Lateral Div.
946	Flexor Digitorum Brevis Medial Div.

Liver

098 Orbicularis Oris Upper Div.
134 Rectus Medialis Bulbi
138 Obliquus Superior Bulbi
140 Obliquus Inferior Bulbi
380 Constrictor Pharyngis Medius
398 Rhomboid Minor
400 Rhomboid Major
412 Subclavius Scapular Div.
462 Pectoralis Major Sternal Div.
494 Supinator Ulnar Div.
518 Extensor Carpi Radialis Longus Abductor Div.
524 Extensor Pollicis Brevis Radial Div.
562 Flexor Digitorum Profundus Manus Lateral Div.
578 Lumbricales Manus First
730 Quadratus Lumborum Costal Div.
794 Rectus Femoris, Reflected Head
806 Adductor Longus Superior Div.
874 Gastrocnemius Lateral Div.
880 Soleus Lateral Div.
900 Flexor Hallucis Longus Tibial Div.
922 Adductor Hallucis Inferior Div.
956 Flexor Digitus Pedis, Fifth

Lungs

114 Masseter Superficial Div.
346 Obliquus Capitis Superior
402 Serratus Anterior Superior Div.
404 Serratus Anterior Inferior Div.
406. Pectoralis Minor Superior Div
408 Pectoralis Minor Inferior Div.
434 Teres Major Inferior Div.
446 Coracobrachialis Septal Div.
452 Deltoideus Middle Posterior Div.
454 Deltoideus Middle Anterior Div.
456 Deltoideus Anterior Scapular Div.
458 Deltoideus Anterior Clavicular Div.
482 Brachioradialis Septal Div.
552 Extensor Digiti Minimi Manus
584 Abductor Digiti Minimi Manus Abductor Div.
736 Iliocostalis Lumborum
744 Pubococcygeus
784 Gluteus Medius Anterior Div.

Lungs (Continued)

786 Gluteus Minimus Anterior Div.
816 Vastus Medialis Upper Div.
822 Obturator Internus
862 Gemellus Inferior
890 Peroneus Brevis Fibular Div.
894 Peroneus Tertius
928 Flexor Hallucis Brevis Third Cuneiform Div.
930 Flexor Hallucis Brevis Cuboid Div.
934 Abductor Hallucis Oblique Head Metatarsal Div.
972 Abductor Digitus Pedis Fifth

Lymphatics Of Colon

546 Adductor Pollicis Obliquus
572 Lumbricales Manus Fourth
582 Abductor Digiti Minimi Manus, Flexor Div.
694 Obliquus Externus Abdominis Lateral Div.

Lymphatics Of Duodenum

416 Latissimus Dorsi Lumbar Div.

Lymphatics Of Face And Neck

276 Sternocleidomastoid Clavicular Div.
530 Abductor Pollicis Longus Ulnar Div.

Lymphatics Of Gallbladder

132 Rectus Inferior Bulbi
490 Anconeus Ulnar Div.

Lymphatics Of Gallbladder Duct System

138 Obliquus Superior Bulbi
580 Flexor Digiti Minimi Brevis Manus

Lymphatiacs Of Ileum

414 Latissimus Dorsi Thoracic Div.
796 Rectus Femoris Straight Head
810 Sartorius
950 Flexor Digitus Pedis Second

Lymphatics Of Jejunum

140 Obliquus Inferior Bulbi
710 Iliacus
938 Abductor Hallucis Transverse Head Lateral Div.

Lymphatics Of Lungs

140 Obliquus Inferior Bulbi
424 Infraspinatus, Superior Div.
648 Serratus Posterior Superior Div.
710 Iliacus
938 Abductor Hallucis Transverse Head Lateral Div.

Lymphatics Of Rectal Area

574 Lumbricales Manus Third

Lymphatics Of Small Intestine (Inguinal Lymph Nodes)

656 Diaphram Number One Right Side Lumbar Div.

Lymphatics Of Stomach

728 Psoas Minor
924 Flexor Hallucis Brevis First Cuneiform Div.

Lymphatics Of Submandibular

282 Scalenus Medius
856 Semimembranosis Tibial Div.

Lymphatics Of Thoracic Duct

522 Extensor Pollicus Longus Septal Div.

Lymphatics Of Throat

500 Palmaris Longus

Lymphatics Of Thyroid

846 Adductor Magnus Transverse Div.

Lymphatics Of Tonsils

876 Plantaris

Mammary Gland

400 Rhomboid Major
462 Pectoralis Major Sternal Div.
614 Longissimus Thoracis Upper Lumbar Div.
724 Psoas Major Thoracic Div.
782 Gluteus Medius Middle Div.

Nose

304 Thyrohyoideus
444 Coracobrachialis Coracoid Div.
508 Flexor Carpi Ulnaris Adductor Div.
514 Extensor Carpi Radialis Brevis
530 Abductor Pollicis Longus Ulnar Div.
572 Lumbricales Manus Fourth
652 Serratus Posterior Inferior Div.
690 Pyramidalis
814 Quadratus Femoris
846 Adductor Magnus Transverse Div.
892 Peroneus Brevis Septal Div.
934 Abductor Hallucis Oblique Head Metatarsal Div.
972 Abductor Digitus Pedis Fifth
974 Abductor Digiti Minimi Pedis

Ovaries/Testicle

884 Tibialis Posterior Fibular Div.
936 Abductor Hallucis Transverse Head Medial Div.

Pancreas

110 Temporalis Parietal Div.
136 Rectus Lateralis Bulbi
274 Sternocleidomastoid Sternal Div.
286 Platysma Anterior Div.
322 Splenius Capitis Mastoid Div.
370 Thyroarytenoideus
414 Latissimus Dorsi Thoracic Div.
532 Abductor Pollicis Longus Radial Div.
542 Abductor Pollicis Brevis
550 Extensor Digitorum Communis Manus Lateral Div.
554 Extensor Indicis Proprius
556 Flexor Digitorum Superficialis Medial Div.
580 Flexor Digiti Minimi Brevis Manus
712 Iliacus Minor
786 Gluteus Minimus Anterior Div.
848 Gluteus Maximus Iliac Div.
882 Tibialis Posterior Tibial Div.

Pancreas (Inguinal Lymph Nodes)

662 Diaphram Number Four Left Side Lumbar Div.

Pancreatic Duct System

062 Orbicularis Occuli Lower Div.
112 Temporalis Occipital Div.
288 Platysma Posterior Div.
290 Digastricus Anterior Belly Div.
362 Cricoarytenoideus Lateralis
410 Subclavius Clavicular Div.
442 Subscapularis Inferior Div.
490 Anconeus Ulnar Div.
518 Extensor Carpi Radialis Longus Abductor Div.
526 Extensor Pollicis Brevis Septal Div.
528 Flexor Pollicis Longus
566 Interossei Dorsales Manus Third
588 Opponens Digiti Minimi Manus Flex. Div.
618 Longissimus Thoracis Middle Thoracic Div.
740 Coccygeus Sacral Div.
752 Cremaster Number 3
788 Gluteus Minimus Posterior Div.
798 Pectineus
832 Vastus Lateralis Middle Div.
834 Vastus Lateralis Lower Div.
836 Vastus Intermedius Medial Div.
848 Gluteus Maximus Iliac Div.
858 Semimembranosis Popliteal Div.
926 Flexor Hallucis Brevis Tendonal Div.
940 Extensor Hallucis Brevis
958 Adductor Digitus Pedis Second

Parathyroid

070 Depressor Septi Nasi
888 Peroneus Longus Metatarsal Div.
126 Pterygoideus Lateralis (Ext.) Lower Div.
574 Lumbricales Manus Third
396 Levator Scapula Inferior Div.
576 Lumbricales Manus Second

Penis/Vaginal Vault

058 Levator Palpebrae Superioris
332 Semispinalis Capitis
434 Teres Major Inferior Div.
464 Pectoralis Major Costal Div.
484 Pronator Teres Humeral Div.
708 Rectus Abdominis Fourth Div. Lateralis
780 Gluteus Medius Posterior Div.
788 Gluteus Minimus Posterior Div.

Penis/Vaginal Vault (Continued)

792 Tensor Fascia Lata Posterior Div.
804 Adductor Longus Inferior Div.
870 Popliteus
944 Quadratus Plantae Lateral Div.
954 Flexor Digitus Pedis, Fourth

Pharynx

110 Temporalis Parietal Div.
380 Constrictor Pharyngis Medius
540 Opponens Pollicis Abductor Div.
548 Extensor Digitorum Communis Manus Medial Div.
592 Interossei Palmares Third

Pineal

112 Temporalis Occipital Div.
124 Pterygoideus Lateralis (Ext.) Upper Div.—Disc
432 Teres Major Superior Div.
540 Opponens Pollicis Abductor Div.
612 Spinalis Thoracis Thoracic Div.
924 Flexor Hallucis Brevis First Cuneiform Div.

Posterior Pituitary

118 Masseter Deep Div.
120 Pterygoideus Medialis (Int.) Sphenoid Div.
390 Trapezius Middle Div.
398 Rhomboid Minor
412 Subclavius Scapular Div.
436 Subscapularis Superior Div.
486 Pronator Teres Ulnar Div.
538 Opponens Pollicis Flexor Div.
552 Extensor Digiti Minimi Manus
578 Lumbricales Manus First
714 Transverse Abdominis Upper Div.
728 Psoas Minor
820 Vastus Medialis Lower Div.
850 Gluteus Maximus Sacral Div.
854 Semitendinosis
914 Extensor Digitorum Longus Lateral Divison
974 Abductor Digiti Minimi Pedis

Prostate/Uterus

300 Sternohyoideus
314 Longus Capitis
334 Semispinalis Cervicis
370 Thyroarytenoideus
442 Subscapularis Inferior Div.
460 Pectoralis Major Clavicular Div.
474 Triceps Medial Head
494 Supinator Ulnar Div.
508 Flexor Carpi Ulnaris Adductor Div.
512 Extensor Carpi Ulnaris Extensor Div.
588 Opponens Digiti Minimi Manus Flexor Div.
698 Obliquus Internus Abdominis Lateral Div.
746 Iliococcygeus
782 Gluteus Medius Middle Div.
808 Gracilis
828 Biceps Femoris Longhead Tibial Div.
842 Adductor Magnus Vertical Div.
850 Gluteus Maximus Sacral Div.
860 Piriformis
862 Gemellus Inferior
912 Extensor Digitorum Longus Medial Div
920 Adductor Hallucis Superior Div.
970 Abductor Digitus Pedis Fourth

Salivary Glands (Parotid)

362 Cricoarytenoideus Lateralis
396 Levator Scapula Inferior Div.
416 Latissimus Dorsi Lumbar Div.
476 Articularis Cubiti
836 Vastus Intermedius Medial Div.

Salivary Glands (Sublingual)

334 Semispinalis Cervicis
472 Triceps Lateral Head
594 Interossei Palmaris Second
596 Palmaris Brevis
702. Rectus Abdominis Second Div
714 Transverse Abdominis Upper Div.
828 Biceps Femoris Longhead Tibial Div.
838 Vastus Intermedius Lateral Div
942 Quadratus Plantae, Med. Div.
948 Flexor Digitorum Brevis Lateral Div.

Salivary Glands (Submaudibular)

832 Vastus Lateralis Middle Div.
928 Flexor Hallucis Brevis Third Cuneiform Div.
962 Adductor Digitus Pedis Fourth

Seminal Vesicle

532 Abductor Pollicis Longus Radial Div.
576 Lumbricales Manus, Second

Sinus

536 Interossei Pollicis (Palmaris First)

Sinus (Frontal)

394 Levator Scapula Superior Div.
568 Interossei Dorsales Manus Second
692 Obliquus Externus Abdominis Anterior Div.

Sinus (Maxillary)

420 Supraspinatus Spine Div.
498 Pronator Quadratus Distal Div.
586 Opponens Digiti Minimi Manus
950 Flexor Digitus Pedis Second
956 Flexor Digitus Pedis, Fifth

Sinus (Nasal)

964 Adductor Digitus Pedis Fifth

Sinus (Sphenoid)

438 Subscapularis Third Div.
694 Obliquus Externus Abdominis Lateral Div.

Spleen

306 Omohyoideus
332 Semispinalis Capitis
346 Obliquus Capitis Superior
394 Levator Scapula Superior Div.
448 Deltoideus Posterior Medial Div.
452 Deltoideus Middle Posterior Div.
466 Biceps Brachii Longhead
550 Extensor Digitorum Communis Manus Lateral Div.
560 Flexor Digitorum Profundus Manus Medial Div.
568 Interossei Dorsales Manus Second

SPLEEN (CONTINUED)

590 Interossei Palmares Fourth
662 Diaphram Number Four Left Side Lumbar Div.
752 Cremaster Number 3
812 Obturator Externus
826 Biceps Femoris Longhead Fibular Div.
898 Tibialis Anterior Dorsiflexor Div.
960 Adductor Digitus Pedis Third
966 Abductor Digitus Pedis Second

STOMACH

736 Iliocostalis Lumborum
908 Flexor Digitorum Longus Medial Div.
932 Abductor Hallucis Oblique Head Peroneus Div.

STOMACH (BODY)

618 Longissimus Thoracis Middle Thoracic Div.

STOMACH (FUNDUS)

350 Interspinalis Cervicis
496 Pronator Quadratus Proximal Div.

STOMACH (PYLORIC ANTRUM)

516 Extensor Carpi Radialis Longus Extensor Div.

STOMACH (PYLORIC VESTIBULE)

510 Extensor Carpi Ulnaris Adductor Div

STOMACH (PYLORIC CANAL)

742 Coccygeus Coccyx Div.

STOMACH (SPECIAL CELLS)

130 Rectus Superior Bulbi
132 Rectus Inferior Bulbi
458 Deltoideus Anterior Clavicular Div.
528 Flexor Pollicis Longus
942 Quadratus Plantae Medial Div.

TESTICLE/OVARIES

884 Tibialis Posterior Fibular Div.
936 Abductor Hallucis Transverse Head Medial Div.

Thymus

062 Orbicularis Occuli Lower Div.
122 Pterygoideus Medialis (Int.) Palatine Div.
272 Upper Trapezius Clavicular Div.
304 Thyrohyoideus
404 Serratus Anterior Inferior Div.
420 Supraspinatus Spine Div.
428 Infraspinatus Inferior Div.
564 Interossei Dorsales Manus Fourth
718 Transverse Abdominis Lower Div.
742 Coccygeus Coccyx Div.
830 Vastus Lateralis Superior Div.
904 Extensor Hallucis Longus Interosseous Div.
954 Flexor Digitus Pedis, Fourth
966 Abductor Digitus Pedis Second
976 Extensor Digitorum Brevis

Thyroid

052 Occipitalis
060 Orbicularis Occuli Upper Div.
118 Masseter Deep Div.
120 Pterygoideus Medialis (Int.) Sphenoid Div.
294 Stylohyoideus
298 Geniohyoideus
424 Infraspinatus Superior Div.
430 Teres Minor
438 Subscapularis Third Div.
474 Triceps Medial Head
504 Flexor Carpi Radialis Flexor Div.
746 Iliococcygeus
792 Tensor Fascia Lata Posterior Div.
794 Rectus Femoris Reflected Head
830 Vastus Lateralis Superior Div.
914 Extensor Digitorum Longus Lateral Divison
970 Abductor Digitus Pedis Fourth

Tonsils

122 Pterygoideus Medialis (Int.) Palatine Div.
296 Mylohyoideus
448 Deltoideus Posterior Medial Div.
478 Brachialis
558 Flexor Digitorum Superficialis Lateral Div.
698 Obliquus Internus Abdominis Lateral Div.
732 Quadratus Lumborum Lumbar Div.
838 Vastus Intermedius Lateral Div.
926 Flexor Hallucis Brevis Tendonal Div.
964 Adductor Digitus Pedis Fifth
976 Extensor Digitorum Brevis

Ureter

294 Stylohyoideus
968 Abductor Digitus Pedis Third

Urethra

284 Scalenus Posterior
418 Latissimus Dorsi Iliac Div.
906 Extensor Hallucis Longus Fibular Div.

Urethra (Membranous)

136 Rectus Lateralis Bulbi
890 Peroneus Brevis Fibular Div.

Urethra (Prostate Portion)

896 Tibialis Anterior Supinator Div.

Uterus/Prostate

300 Sternohyoideus
314 Longus Capitis
334 Semispinalis Cervicis
370 Thyroarytenoideus
442 Subscapularis Inferior Div.
460 Pectoralis Major Clavicular Div.
474 Triceps Medial Head
494 Supinator Ulnar Div.
508 Flexor Carpi Ulnaris Adductor Div.
512 Extensor Carpi Ulnaris Extensor Div.
588 Opponens Digiti Minimi Manus Flexor Div.
698 Obliquus Internus Abdominis Lateral Div.
746 Iliococcygeus
782 Gluteus Medius Middle Div,
808 Gracilis
828 Biceps Femoris Longhead Tibial Div.
842 Adductor Magnus Vertical Div.
850 Gluteus Maximus Sacral Div.
860 Piriformis
862 Gemellus Inferior
912 Extensor Digitorum Longus Medial Div.
920 Adductor Hallucis Superior Div.
970 Abductor Digitus Pedis Fourth

Vaginal Vault/Penis

058 Levator Palpebrae Superioris
332 Semispinalis Capitis
434 Teres Major Inferior Div.
464 Pectoralis Major Costal Div.
484 Pronator Teres Humeral Div.
708 Rectus Abdominis Fourth Div. Lateralis
780 Gluteus Medius Posterior Div.
788 Gluteus Minimus Posterior Div.
792 Tensor Fascia Lata Posterior Div.
804 Adductor Longus Inferior Div.
870 Popliteus
944 Quadratus Plantae Lateral Div.
954 Flexor Digitus Pedis, Fourth

Veins Of Stomach

292 Digastricus Posterior Belly Div.

Vertebral Level-Muscle Relationships

Cervical Vertebral Levels

	LEFT	RIGHT
C1		
C2	398, 464, 526, 578, 860	844, 858
C3	058, 122, 290, 882	098, 322, 542, 698, 832
C4	528, 554, 840, 894, 942 970	442, 742, 848, 934
C5	402, 444, 452, 516, 652, 898, 902	424, 460, 974
C6	448, 524, 572, 788, 852	296, 416, 546, 618
C7		392, 326

Thoracic Vertebral Levels

	LEFT	RIGHT
T1	100, 564, 806, 924, 954, 972	286, 514, 532, 740
T2	130, 512, 588, 808, 842	300, 440, 486, 494, 582, 590, 864
T3	132, 134, 302, 438, 612, 642, 696, 796	140, 430, 474, 838, 878
T4	308, 362, 426, 436, 704, 800	332, 732, 780, 794, 910
T5	110, 404, 446, 538, 736, 948	392, 408, 492, 496, 556, 594, 736, 814, 892
T6	070, 314, 510, 520, 548, 830	276, 562, 568, 610, 708, 946, 960
T7	136, 414, 434, 530, 576, 804, 966	398, 420, 490, 528, 566, 714, 834, 884
T8	400, 462, 482, 550, 614, 820, 888	062, 274, 422, 454, 752, 926, 964
T9	102, 484, 700, 712, 818, 874, 880, 936, 940, 962	052, 298, 500, 506, 540, 596, 822, 854
T10	272, 492, 570, 586, 800, 912, 914	346, 534, 592, 810, 846, 932, 950
T11	692, 890, 944, 950, 952	288, 394, 410, 518, 544, 872, 886
T12	284, 498, 656, 726, 938	138, 296, 334, 466, 662, 724, 792, 956

Lumbar Vertebral Levels

	LEFT	RIGHT
L1	126, 580, 718, 722, 734, 816	278, 428, 552, 694, 862, 870
L2	270, 396, 412, 450, 456, 536, 558, 648, 784, 896, 968, 976	396, 406, 522, 738, 748, 790, 900, 906
L3	060, 304, 390, 394, 502, 508, 574, 584, 920, 922, 928	112, 114, 306, 370, 380, 432, 504, 690, 904
L4	118, 282, 458, 470, 706, 730, 782, 812, 876	124, 292, 488, 560, 702, 710,798, 828, 850, 908, 958
L5	350, 476, 478, 480, 826, 856, 930	120, 294, 418, 468, 728, 744, 786, 824, 836

Cranial Bone-Muscle Relationships

CRANIAL BONE	MUSCLE NUMBER
A-P Rockez	722, 862
Ethmoid	284, 292, 422, 538, 544, 572, 580, 582, 614, 800, 886, 920, 946, 954
Frontal	102, 296, 428, 462, 492, 534, 564, 574, 808, 810, 854, 878, 880, 896, 898, 926
Glabella	276, 290, 406, 454, 558, 726, 816, 818, 948
Inferior Conchae	288, 430, 562, 584, 586, 796, 848, 858, 902, 950
Lacrimal	120, 130, 298, 470, 552, 746, 836, 924, 970, 976
Lateral Rocker	062, 122, 282, 392, 840, 860
Mandible	060, 114, 138, 334, 420, 734, 850, 904, 938, 944, 956
Maxillary	272, 404, 434, 442, 468, 496, 498, 530, 578, 648, 656, 662, 698, 706, 712, 728, 738, 742, 780, 788, 798, 842
Nasal	424, 448
Occipital	270, 346, 432, 528, 540, 590, 592, 692, 710, 744, 826, 846, 872, 874, 914, 934, 958
Palatine	126, 440, 466, 476, 560, 732, 736, 740, 852, 906, 930
Parietal	098, 110, 140, 278, 392, 402, 460, 500, 526, 536, 542, 550, 588, 596, 694, 718, 790, 792, 830, 834, 882, 888, 890
Rotation Rocker	124, 326, 724, 784, 794
Sphenoid	100, 134, 302, 390, 394, 416, 426, 486, 488, 490, 494, 506, 514, 568, 576, 612, 702, 832, 844, 856, 884
Styloid	294, 444, 466, 474, 502, 504, 510, 814, 820, 942, 962
Temporal	132, 300, 306, 314, 322, 370, 394, 396, 398, 410, 438, 450, 464, 478, 480, 482, 484, 508, 512, 516, 518, 520, 554, 700, 714, 782, 786, 804, 806, 812, 828, 838, 870, 892, 894, 964, 972
T.M.J.	936
Vomer	112, 118, 400, 446, 524, 532, 556, 594, 642, 690, 730, 822, 900, 966
Zygoma	274, 286, 304, 380, 396, 412, 414, 418, 452, 458, 472, 522, 546, 548, 566, 570, 704, 708, 824, 864, 876

FOOT BONE-MUSCLE RELATIONSHIPS

FOOT BONE	MUSCLE NUMBER
Calcaneus	270, 346, 432, 528, 540, 590, 592, 692, 710, 744, 826, 846, 872, 874, 914, 934, 958
Cuboid	132, 300, 306, 314, 322, 370, 390, 394, 398, 410, 438, 450, 464, 478, 480, 482, 484, 508, 512, 516, 518, 520, 554, 700, 714, 782, 786, 804, 806, 812, 828, 838, 870, 892, 894, 964, 972
Navicular	102, 296, 428, 462, 492, 534, 564, 574, 808, 810, 854, 878, 880, 896, 898, 926
Talus	098, 110, 140, 278, 392, 402, 408, 460, 500, 526,536, 542, 550, 588, 596, 694, 718, 790, 792, 830, 834, 882, 888, 890, 910
1st Cuneiform	284, 292, 422, 544, 572, 580, 582, 614, 696, 800, 886, 920, 946, 954
2nd Cuneiform	824, 864, 876
3rd Cuneiform	100, 134, 274, 286, 302, 304, 380, 396, 406, 412, 414, 416, 418, 426, 452, 454, 458, 468, 472, 490, 494, 506, 522, 546, 570, 576, 578, 612, 702, 704, 708, 742, 832, 844, 856, 884, 928, 948
1st Metatarsal	126, 440, 476, 538, 560, 732, 740, 852, 906, 930
2nd Metatarsal	112, 118, 298, 400, 446, 524, 532, 556, 594, 642, 690, 730, 822, 842, 900, 912, 966
3rd Metatarsal	272, 404, 436, 442, 452, 486, 488, 514, 530, 566, 568, 656, 662, 726, 728, 738, 780, 788, 798, 908
4th Metatarsal	274, 276, 286, 290, 548, 558, 812, 818
5th Metatarsal	434, 496, 498, 648, 698, 706, 712, 922
Proximal Phalanx - Great Toe	060, 114, 138, 334, 420, 734, 850, 904, 936, 938, 944, 956
Proximal Phlanx - 2nd Toe	120, 130, 288, 298, 430, 470, 552, 562, 746, 836, 848, 858, 902, 924, 950, 970, 976
Distal Phalanx - Great Toe	294, 424, 444, 448, 466, 474, 502, 504, 510, 814, 820, 942, 962
Proximal Phalanx- 4th Toe	584, 586
Distal Phalanx - 4th Toe	796

Muscle-Organ Relationships

052 Occipitalis
Gallbladder Duct System
Thyroid

058 Levator Palpebrae Superioris
Colon (Transverse)
Penis/Vaginal Vault

060 Orbicularis Occuli Upper Div.
Ear (Internal)
Thyroid

062 Orbicularis Occuli Lower Div.
Thymus
Pancreatic Duct System

070 Depressor Septi Nasi
Ductus Deferens
Parathyroid

098 Orbicularis Oris Upper Div.
Gallbladder
Liver

100 Orbicularis Oris Lower Div.
Anterior Pituitary
Gonads

102 Buccinator
Colon (Transverse)
Gonads

110 Temporalis Parietal Div.
Pancreas
Pharynx

112 Temporalis Occipital Div.
Pineal
Pancreatic Duct System

114 Masseter Superficial Div.
Adrenal
Lungs

118 Masseter Deep Div.
Posterior Pituitary
Thyroid

120 Pterygoideus Medialis, Sphenoid Div.
Thyroid
Posterior Pituitary

122 Pterygoideus Medialis, Palatine Div.
Thymus
Tonsils

124 Pterygoideus Lateralis, Upper Div. Disc
Pineal
Gonads

126 Pterygoideus Lateratis, Lower Div.
Gonads
Parathyroid

130 Rectus Superior Bulbi
Kidney
Stomach (Special Cells)

132 Rectus Inferior Bulbi
Lymphatics of Gallbladder
Stomach (Special Cells)

134 Rectus Medialis Bulbi
Gallbladder Duct System
Liver

136 Rectus Lateralis Bulbi
Pancreas
Urethra (Membranous)

138 Obliqluus Superior Bulbi
Liver
Lymphatics of Gallbladder Duct System

140 Obliquus Inferior Bulbi
Liver
Lymphatics of Jejunum

270 Upper Trapezius Scapular Div.
Colon
Eye

272 Upper Trapezius Clavicular Div.
Ear (Internal)
Thymus

274 Sternocleidomastoid Sternal Div.
Pancreas
Gallbladder

276 Sternocleidomastoid Clavicular Div.
Larynx
Lymphatics of Face and Neck

278 Scalenus Anterior
Bladder
Ductus Deferens

282 Scalenus Medius
Gallbladder
Lymphatics of Submandibular

284 Scalenus Posterior
Kidney
Urethra

286 Platysma Anterior Div.
Duodenum (Descending Portion)
Pancreas

288 Platysma Pneterior Div.
Rectum
Pancreatic Duct System

290 Digastricus Anterior Belly Div.
Pancreatic Duct System
Bladder

292 Digastricus Posterior Belly Div.
Gallbladder
Veins of Stomach

294 Stylohyoideus
Thyroid
Ureter

296 Mylohyoideus
Bladder
Tonsils

298 Geniohyoideus
Eye
Thyroid

300 Sternohyoideus
Gallbladder (Duct System)
Prostate/Uterus

302 Sternothyroideus
Adrenal
Kidney

304 Thyrohyoideus
Thymus
Nose

306 Omohyoideus
Eye
Spleen

308 Longus Colli Vertical Div.
Jejunum (Special Cells)
Gonads

314 Longus Capitis
Anterior Pituitary
Prostate/Uterus

322 Splenius Capitis Mastoid Div.
Pancreas
Anterior Pituitary

326 Splenius Cervicis
Adrenal
Heart

332 Semispinalis Capitis
Spleen
Penis/Vaginal Vault

334 Semispinalis Cervicis
Prostate/Uterus
Salivary Glands (Sublingual)

346 Obliquus Capitis Superior
Spleen
Lungs

350 Interspinalis Cervicis
Colon (Ascending/Descending)
Stomach (Fundus)

362 Cricoarytenoideus Lateralis
Pancreatic Duct System
Salivary Glands (Parotid)

370 Thyroarytenoideus
Prostate/Uterus
Pancreas

380 Constrictor Pharyngis Medius
Liver
Pharynx

390 Trapezius Middle Div.
Ear
Posterior Pituitary

392 Trapezius Lower Div.
Bladder
Kidney

394 Levator Scapula Superior Div.
Sinus (Frontal)
Spleen

396 Levator Scapula Inferior Div.
Parathyroid
Parotid Gland

398 Rhomboid Minor
Posterior Pituitary
Liver

400 Rhomboid Major
Liver
Mammary Tissue

402 Serratus Anterior Superior Div.
Lungs
Gonads

404 Serratus Anterior Inferior Div.
Lungs
Thymus

406 Pectoralis Minor Superior Div.
Heart
Lungs

408 Pectoralis Minor Inferior Div.
Kidney
Lungs

410 Subclavius Clavicular Div.
Ear (External)
Pancreatic Duct System

412 Subclavius Scapular Div.
Liver
Posterior Pituitary

414 Latissimus Dorsi Thoracic Div.
Lymphatics of Ileum
Pancreas

416 Latissimus Dorsi Lumbar Div.
Lymphatics of Duodenum
Salivary Glands (Parotid)

418 Latissimus Dorsi Iliac Div.
Colon (Transverse)
Urethra

420 Supraspinatus Spine Div.
Thymus
Sinus (Maxillary)

422 Supraspinatus Fosse Div.
Esophagus
Anterior Pituitary

424 Infraspinatus Superior Div.
Lymphatics of Lungs
Thyroid

426 Infraspinatus Middle Div.
Eye
Gallbladder

428 Infraspinatus Inferior Div.
Gallbladder Duct System
Thymus

430 Teres Minor
Thyroid
Gonads

432 Teres Major Superior Div.
Ear (External)
Pineal

434 Teres Major Inferior Div.
Lungs
Penis/Vaginal Vault

436 Subscapularis Superior Div.
Heart
Posterior Pituitary

438 Subscapularis Third Div.
Sinus (Sphenoid)
Thyroid

440 Subscapularis Second Div.
Esophagus
Heart

442 Subscapularis Inferior Div.
Prostate/Uterus
Pancreatic Duct System

444 Coracobrachialis Coracoid Div.
Kidney
Nose

446 Coracobrachialis Septal Div.
Bladder
Lungs

448 Deltoideus Posterior Medial Div.
Spleen
Tonsils

450 Deltoideus Posterior Lateral Div.
Colon (Ascending/Descending)
Eye

452 Deltoideus Middle Posterior Div.
Lungs
Spleen

454 Deltoideus Middle Anterior Div.
Gallbladder
Lungs

456 Deltoideus Anterior Scapular Div.
Lungs
Adrenal

458 Deltoideus Anterior Clavicular Div.
Lungs
Stomach (Special Cells)

460 Pectoralis Major Clavicular Div.
Heart
Prostate/Uterus

462 Pectoralis Major Sternal Div.
Liver
Mammary Tissue

464 Pectoralis Major Costal Div.
Penis/Vaginal Vault
Anterior Pituitary

466 Biceps Brachii Longhead
Kidney
Spleen

468 Biceps Brachii Shorthead
Colon (Sigmoid)
Gonads

470 Triceps Longhead
Duodenum (Superior Portion)
Eustachian Tube

472 Triceps Lateral Head
Gallbladder
Salivary Glands (Sublingual)

474 Triceps Medial Head
Thyroid
Prostate/Uterus

476 Articularis Cubiti
Bladder
Salivary Glands (Parotid)

478 Brachiatis
Jejunum
Tonsils

480 Brachioradialis Humeral Div.
Ileum (Special Cells)
Gonads

482 Brachioradialis Septal Div.
Kidney
Lungs

484 Pronator Teres Humeral Div.
Adrenal
Penis/Vaginal Vault

486 Pronator Teres Ulnar Div.
Kidney
Posterior Pituitary

488 Anconeus Olecranon Div.
Bladder
Heart

490 Anconeus Ulnar Div.
Lymphatics of Gallbladder
Pancreatic Duct System

492 Supinator Radial Div.
Ear
Gonads

494 Supinator Ulnar Div.
Liver
Prostate/Uterus

496 Pronator Quadratus Proximal Div.
Eustachian Tube
Stomach (Fundus)

498 Pronator Quadratus Distal Div.
Kidney
Sinus (Maxillary)

500 Palmaris Longus
Kidney
Lymphatics of Throat

502 Flexor Carpi Radialis Abd. Div.
Esophagus
Gallbladder

504 Flexor Carpi Radialis Flexor Div.
Adrenal
Thyroid

506 Flexor Carpi Ulnaris Flexor Div.
Ductus Deferens
Ileum

508 Flexor Carpi Ulnaris Add. Div.
Prostate/Uterus
Nose

510 Extensor Carpi Ulnaris Add. Div.
Colon (Ascending/Descending)
Stomach (Pyloric Vestibule)

512 Extensor Carpi Ulnaris Extensor Div.
Kidney
Prostate/Uterus

514 Extensor Carpi Radialis Brevis
Duodenum (Special Cells)
Nose

516 Extensor Carpi Radialis Long. Ext. Div.
Kidney
Stomach (Pyloric Antrum)

518 Extensor Carpi Radialis Long. Abd. Div.
Liver
Pancreatic Duct System

520 Extensor Pollicis Longus Ulnar Div.
Gallbladder Duct System
Anterior Pituitary

522 Extensor Pollicis Longus Sept. Div.
Lymphatics of Thoracic Duct
Epididymis

524 Extensor Pollicis Brevis Radial Div.
Gallbladder Duct System
Liver

526 Extensor Pollicis Brevis Sept. Div.
Adenoids
Pancreatic Duct System

528 Flexor Pollicis Longus
Pancreatic Duct System
Stomach (Special Cells)

530 Abductor Pollicis Longus Ulnar Div.
Lymphatics of Face and Neck
Nose

532 Abductor Pollicis Longus Radial Div.
Pancreas
Seminal Vesicle

534 Flexor Pollicis Brevis
Adrenal (Cortex)
Adrenal (Medulla)

536 Interossei Pollicis (Palmaris First)
Bladder
Sinus

538 Opponens Pollicis Flexor Div.
Posterior Pituitary
Gonads

540 Opponens Pollicis Abductor Div.
Pharynx
Pineal

542 Abductor Pollicis Brevis
Pancreas
Gallbladder Duct System

544 Adductor Pollicis Transversus
Ileum
Heart

546 Adductor Pollicis Obliquus
Anterior Pituitary
Lymphatics of Colon

548 Extensor Digit. Communis Manus Med. Div.
Ductus Deferens
Pharynx

550 Extensor Digit. Communis Manus Lat. Div.
Pancreas
Spleen

552 Extensor Digiti Minimi Manus
Lungs
Posterior Pituitary

554 Extensor Indicis Proprius
Kidney
Pancreus

556 Flexor Digit. Superficialis Med. Div.
Pancreas
Lyden Gland

558 Flexor Digit. Superficialis Lat. Div.
Anterior Pituitary
Tonsils

560 Flexor Digit. Profundus Manus Med. Div.
Bladder
Spleen

562 Flexor Digit. Profundus Manus Lat. Div.
Jejunum
Liver

564 Interossei Dorsales Manus Fourth
Heart
Thymus

566 Interossei Dorsales Manus Third
Pancreatic Duct System
Esophagus

568 Interossei Dorsales Manus Second
Sinus (Frontal)
Spleen

570 Interossei Dorsales Manus First
Anterior Pituitary
Bladder

572 Lumbricales Manus Fourth
Nose
Lymphatics of Colon

574 Lumbricales Manus Third
Lymphatics of Rectal Area
Parathyroid

576 Lumbricales Manus Second
Parathyroid
Seminal Vesicles

578 Lumbricales Manus First
Liver
Posterior Pituitary

580 Flexor Digiti Minimi Brevis Manus
Pancreas
Lymphatics of Gallbladder Duct System

582 Abductor Digiti Minimi Manus Flex. Div.
Lymphatics of Transverse Colon
Adrenals

584 Abductor Digiti Minimi Manus Abd. Div.
Ileum (Special Cells)
Lungs

586 Opponens Digiti Minimi Manus
Jejunum
Sinus (Maxillary)

588 Opponens Digiti Minimi Manus Flex. Div.
Pancreas (Protein)
Prostate

590 Interossei Palmares Fourth
Spleen
Larynx

592 Interossei Palmares Third
Pharynx
Gonads

594 Interossei Palmares Second
Ileum (Special Cells)
Salivary Glands (Sublingual)

596 Palmaris Brevis
Gallbladder
Salivary Glands (Sublingual)

610 Spinalis Thoracis Lumbar Div.
Bladder
Heart

612 Spinalis Thoracis Thoracic Div.
Heart
Pineal

614 Longissimus Thoracis Upp. Lumb. Div.
Adrenal
Mammary

618 Longissimus Thoracis Mid. Thor. Div.
Stomach (Body)
Pancreatic Duct System

642 Levatores Costarum Lower Div.
Colon (Sigmoid)
Gallbladder

648 Serratus Posterior Superior Div.
Bladder
Lymphatics of Lungs

652 Serratus Posterior Inferior Div.
Jejunum
Nose

656 Diaphram #1, Right Side Lumbar Div.
Heart, Lymphatics of Small
Intestine(Inguinal Lymph Nodes)

662 Diaphram #4, Left Side Lumbar Div.
Spleen
Pancreas (Inguinal Lymph Nodes)

690 Pyramidalis
Bladder
Nose

692 Obliquus Externus Abdominis Ant. Div.
Colon (Ascending/Descending)
Sinus (Frontal)

694 Obliquus Externus Abdominis Lat. Div.
Lymphatics of Colon
Sinus (Sphenoid)

696 Obliquus Internus Abdominis Ant. Div.
Colon (Hepatic and Splenic Flexure)
Eye

698 Obliquus Internus Abdominis Let. Div.
Tonsils
Prostate/Uterus

700 Rectus Abdominis First Div.
Adrenal
Colon (Ascending/Descending)

702 Rectus Abdominis Second Div.
Duodenum (Horizontal Portion)
Salivary Glands (Sublingual)

704 Rectus Abdominis Third Div.
Eye
Ileum

706 Rectus Abdominis Fourth Div. Medialis
Duodenum (Ascending Portion)
Esophagus

708 Rectus Abdominis Fourth Div. Medialis Lat.
Bladder
Penus/Vaginal Vault

710 Iliacus
Colon (Ascending/Descending)
Lymphatics of Jejunum

712 Iliacus Minor
Kidney
Pancreas

714 Transverse Abdominis Upper Div.
Salivary Glands (Submandibular)
Posterior Pituitary

718 Transverse Abdominis Lower Div.
Duodenum (Descending Portion)
Thymus

722 Psoas Major Lumbar Div.
Colon (Rectal Area)
Kidney

724 Psoas Major Thoracic Div.
Kidney
Mammary

726 Psoas Major Diaphragmatic Div.
Adrenal
Bladder

728 Psoas Minor
Lymphatics of Stomach
Posterior Pituitary

730 Quadratus Lumborum Costal Div.
Colon (Ascending/Descending)
Liver

732 Quadratus Lumborum Lumbar Div.
Gallbladder
Tonsils

734 Multifidus Lumbosacral Div.
Colon (Sigmoid)
Ductus Deferens

736 Iliocostalis Lumborum
Lungs
Stomach

738 Longissimus Lumborum
Eye
Jejunum

740 Coccygeus Sacral Div.
Ileum
Pancreatic Duct System

742 Coccygeus Coccyx Div.
Stomach (Pyloric Canal)
Thymus

744 Pubococcygeus
Heart
Lungs

746 Iliococcygeus
Thyroid
Prostate/Uterus

752 Cremaster Number 3
Spleen
Pancreatic Duct System

780 Gluteus Medius Posterior Div.
Gallbladder Duct System
Penis/Vaginal Vault

782 Gluteus Medius Middle Div.
Prostate/Uterus
Mammary Gland

784 Gluteus Medius Anterior Div.
Lungs
Gonads

786 Gluteus Minimus Anterior Div.
Pancreas
Lungs

788 Gluteus Minimus Posterior Div.
Pancreatic Duct System
Penis/Vaginal Vault

790 Tensor Fascia Lata Anterior Div.
Colon
Eustachian Tube

792 Tensor Fascia Lata Posterior Div.
Thyroid
Penis/Vaginal Vault

794 Rectus Femoris Reflected Head
Liver
Thyroid

796 Rectus Femoris Straight Head
Jejunum
Lymphatics of Ileum

798 Pectineus
Colon (Transverse)
Pancreatic Duct System

800 Adductor Brevis
Duodenum (L-Jejunum Junction; R-Ampulla of Vater), Eye

804 Adductor Longue Inferior Div.
Ileum
Penis/Vaginal Vault

806 Adductor Longus Superior Div.
Liver
Gonads

808 Gracilis
Adrenal
Prostate/Uterus

810 Sartorius
Adrenal
Lymphatics of Ileum

812 Obturator Externus
Heart
Spleen

814 Quadratus Femoris
Gonads
Nose

816 Vastus Medialis Upper Div.
Duodenum (Special Cells)
Lungs

818 Vastus Medialis Middle Div.
Adrenal
Gallbladder

820 Vastus Medialis Lower Div.
Ileum
Posterior Pituitary

822 Obturator Internus
Lungs
Larynx

824 Biceps Femoris Shorthead
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826 Biceps Femoris Longhead Fib. Div.
Colon (Ascending/Descending)
Spleen

828 Biceps Femoris Longhead Tib. Div.
Prostate/Uterus
Salivary Glands (Sublingual)

830 Vastus Lateralis Superior Div.
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Thymus

832 Vastus Lateralis Middle Div.
Pancreatic Duct System
Salivary Glands (Submandibular)

834 Vastus Lateralis Lower Div.
Ileum
Pancreatic Duct System

836 Vastus Intermedius Medial Div.
Ileum
Salivary Glands (Parotid)

838 Vastus Intermedius Lateral Div.
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Salivary Glands (Sublingual)

840 Articularis Genu
Adrenal
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842 Adductor Magnus Vertical Div.
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Prostate/Uterus

844 Adductor Magnus Oblique Div.
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846 Adductor Magnus Transverse Div.
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Lymphatics of Thyroid

848 Gluteus Maximus Iliac Div.
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850 Gluteus Maximus Sacral. Div.
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852 Gluteus Maximus Coccygeal Div.
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854 Semitendinosis
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Posterior Pituitary

856 Semimembranosis Tibial Div.
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Lymphatics of Submandibular

858 Semimembranosis PopliteaL Div.
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860 Piriformis
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862 Gemellus Inferior
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Prostate/Uterus

864 Gemellus Superior
Epididymis
Heart

870 Popliteus
Gallbladder
Penis/Vaginal Vault

872 Gastrocnemius Medial Div.
Duodenum
Kidney

874 Gastrocnemius Lateral Div.
Colon (Ascending/Descending)
Liver

876 Plantaris
Jejunum
Lymphatics of Tonsils

878 Soleus Medial Div.
Adrenal
Anterior Pituitary

880 Soleus Lateral Div.
Colon (Rectal Area)
Liver

882 Tibialis Posterior Tibial Div.
Ileum
Pancreas

884 Tibialis Posterior Fibular Div.
Heart
Testicle/Ovaries

886 Peroneus Longus Cuneiform Div.
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Duodenum

888 Peroneus Longue Metatarsal Div.
Gallbladder
Parathyroid

890 Peroneus Brevis Fibular Div.
Lungs
Urethra (Membranous)

892 Peroneus Brevis Septal Div.
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Nose

894 Peroneus Tertius
Bladder
Lungs

896 Tibialis Anterior Supinator Div.
Jejunum
Urethra (Prostate Portion)

898 Tibialis Anterior Dorsifexor Div.
Ductus Deferens
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Anterior Pituitary

902 Flexor Hallucis Longus Fibular Div.
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Kidney

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Anterior Pituitary
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906 Extensor Hallucis Longus Fib. Div.
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910 Flexor Digitorum Longus Lat. Div.
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Anterior Pituitary

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926 Flexor Hallucis Brevis Tendonal Div.
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934 Abductor Hallucis Obl. Head Meta. Div.
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936 Abductor Hallucis Trans. Head Med. Div.
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938 Abductor Hallucis Trans. Head Lat. Div.
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962 Adductor Digitus Pedis Fourth
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964 Adductor Digitus Pedis Fifth
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966 Abductor Digitus Pedis Second
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968 Abductor Digitus Pedis Third
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970 Abductor Digitus Pedis Fourth
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972 Abductor Digitus Pedis Fifth
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974 Abductor Digiti Minimi Pedis
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976 Extensor Digitorum Brevis
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Chapter VII

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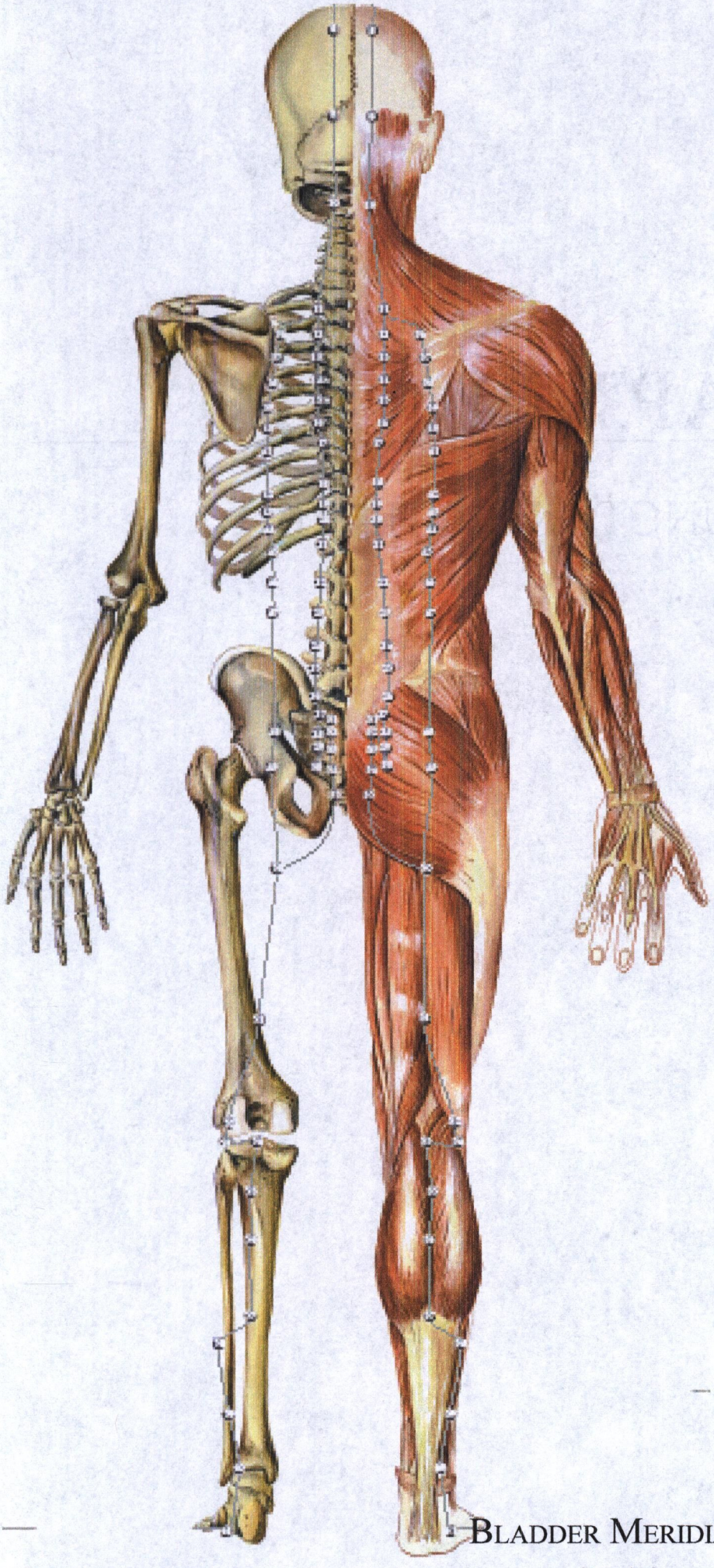
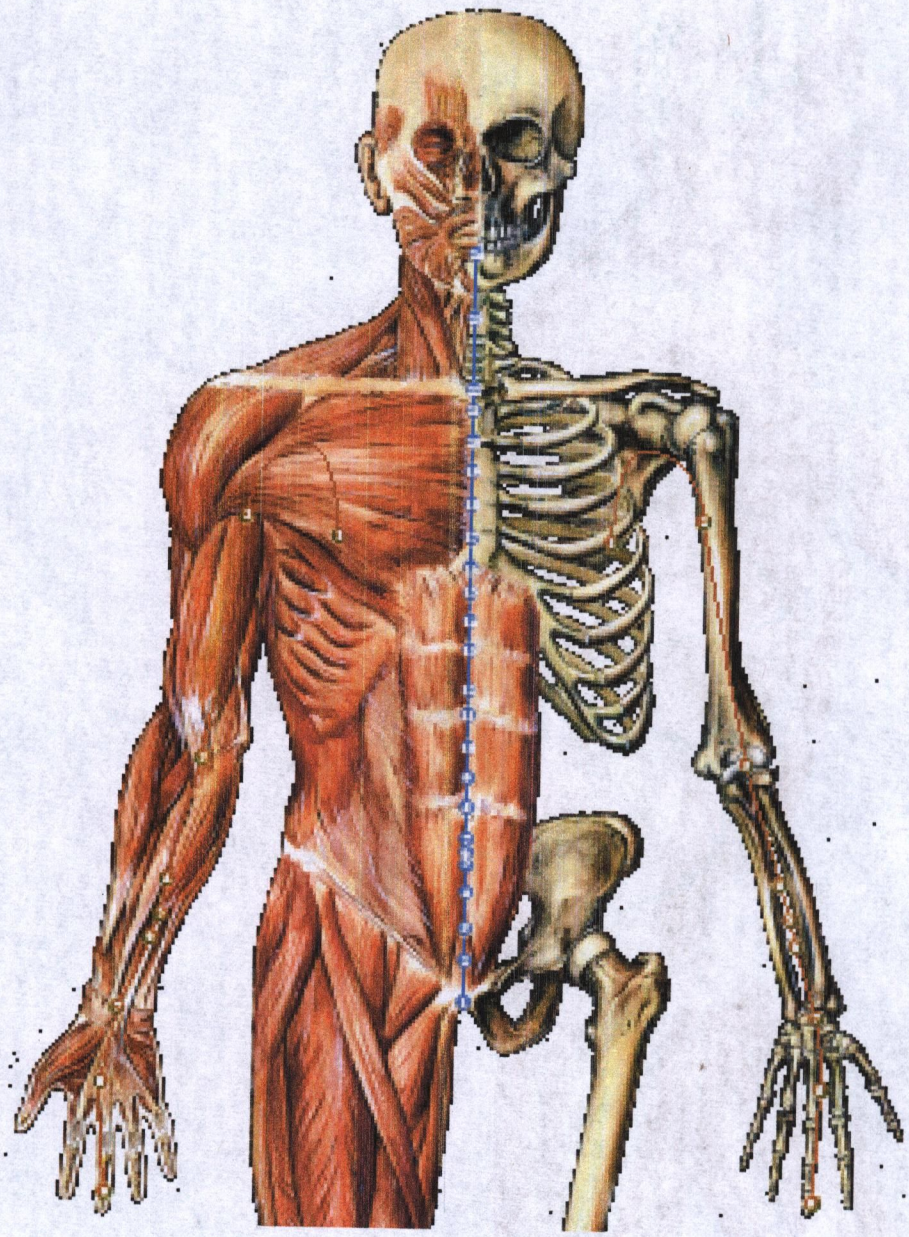
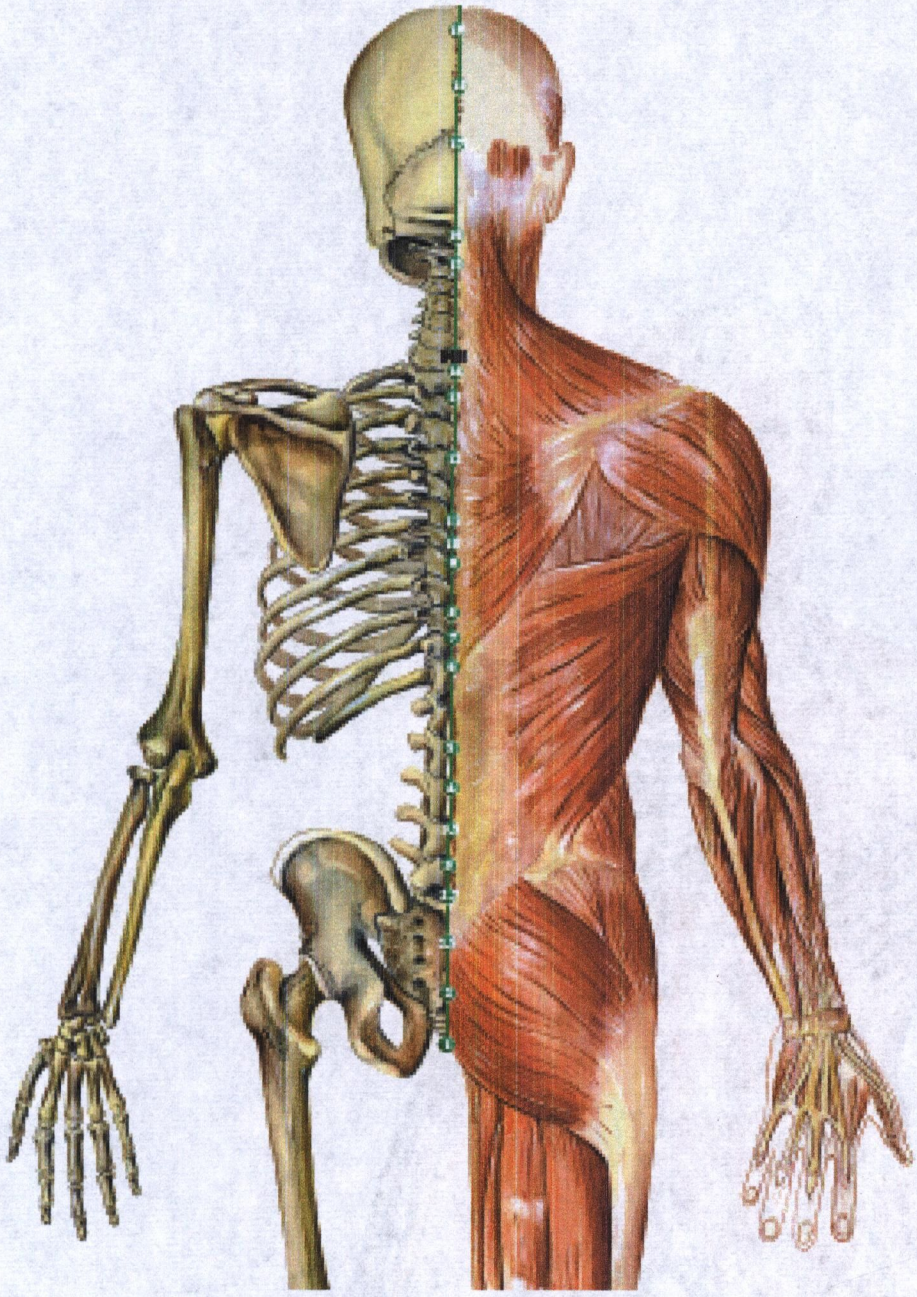


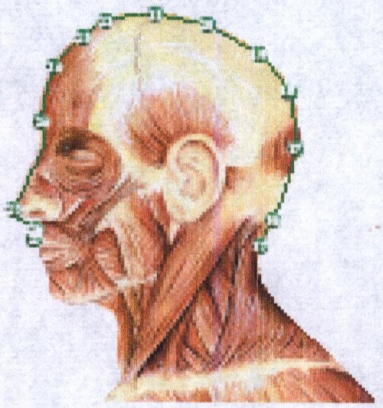
Bladder Meridian



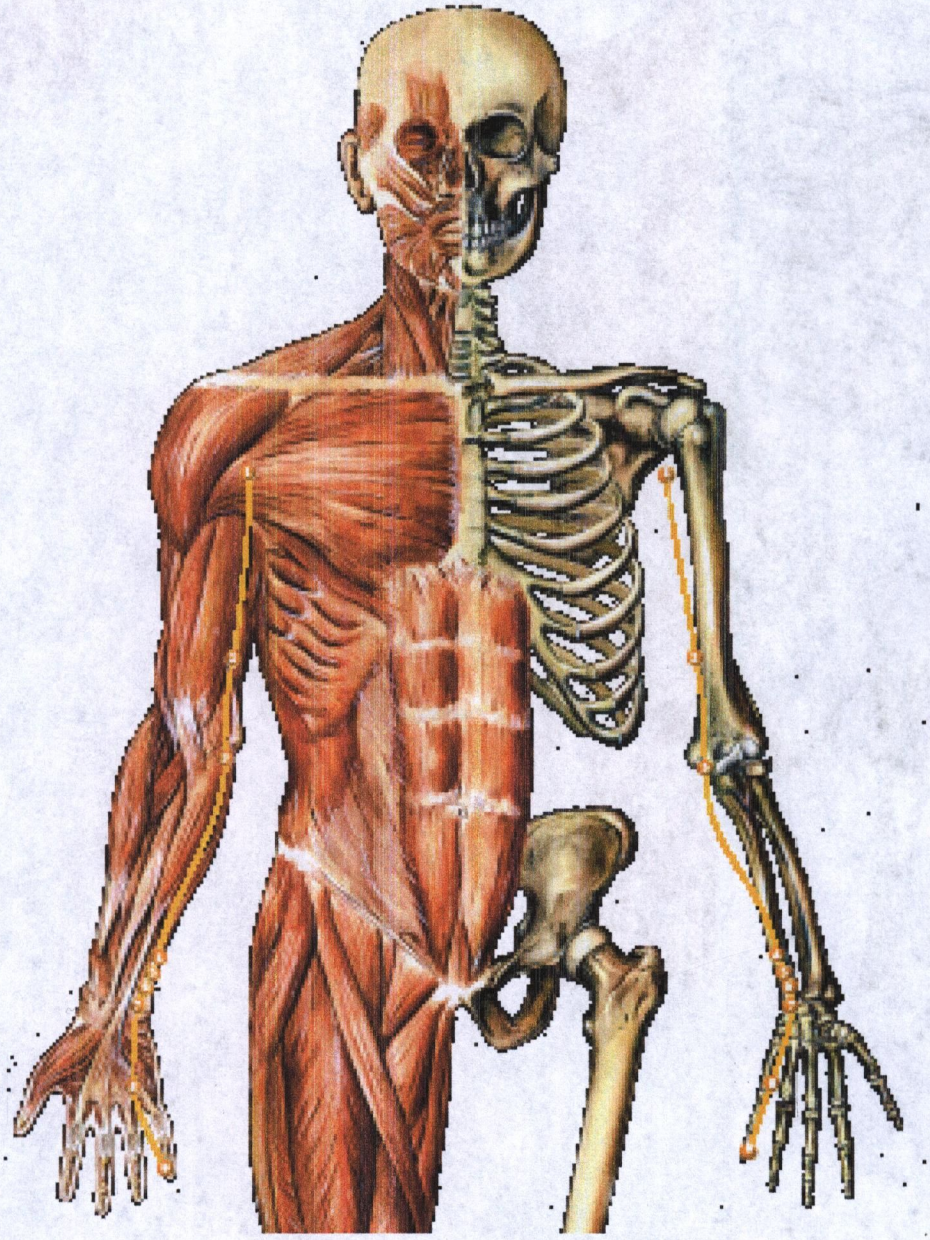
CIRCULATION SEX & CONCEPTION VESSELMERDIAN

GALL BLADDER MERIDIAN

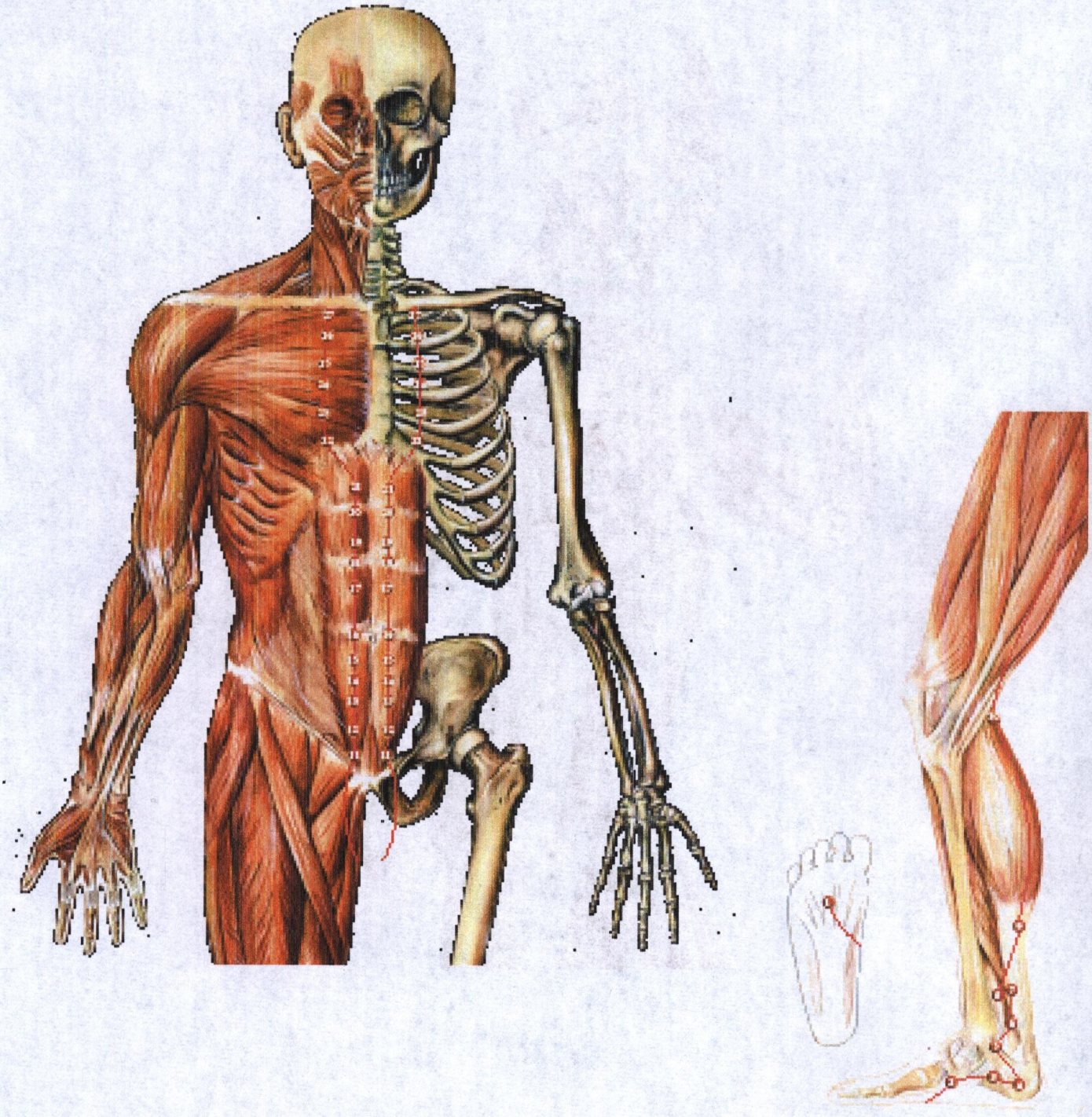




Governing Vessel Meridian



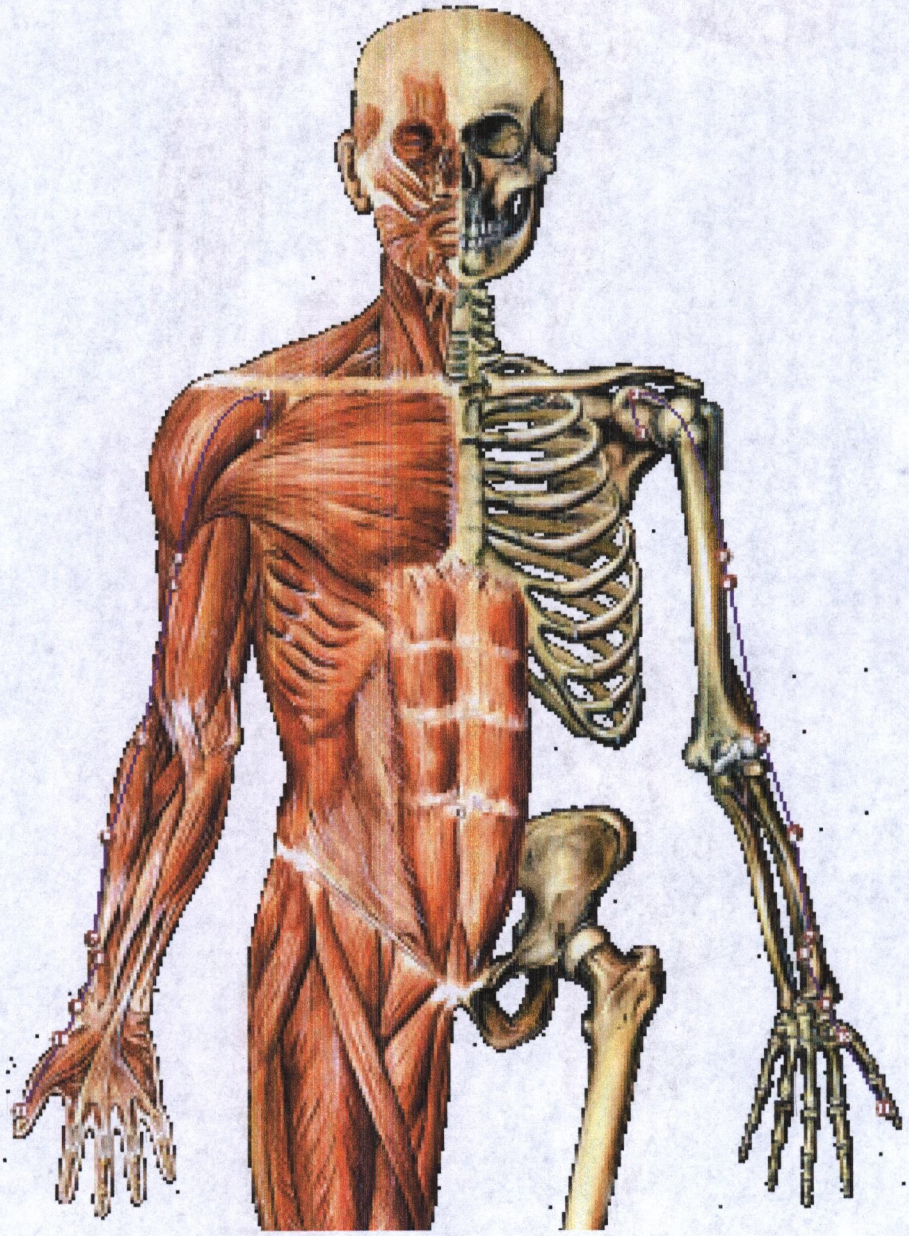
Heart Meridian



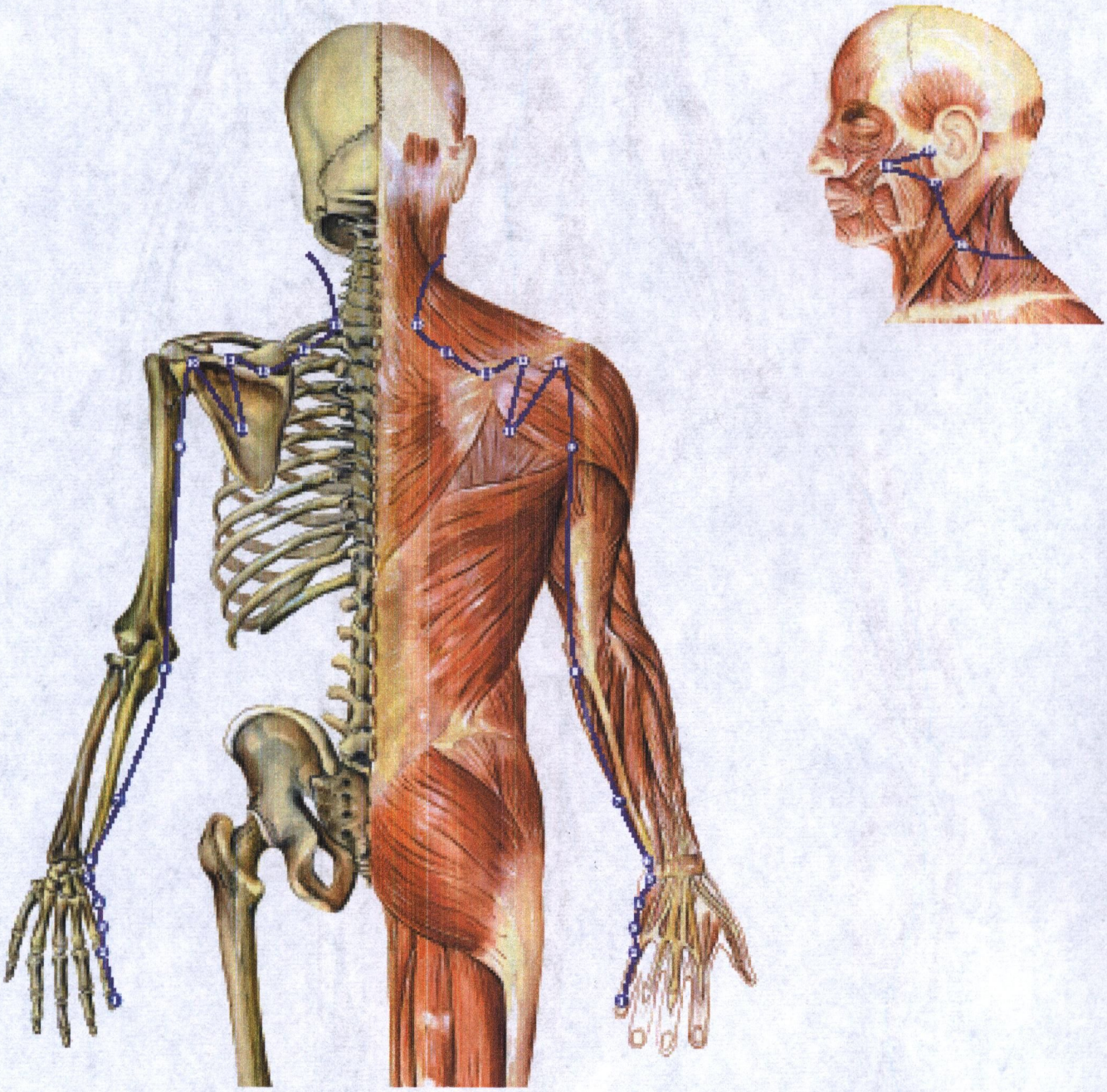
KIDNEY MERIDIAN

Large Intestine Meridian

Liver Meridian



Lung Meridian



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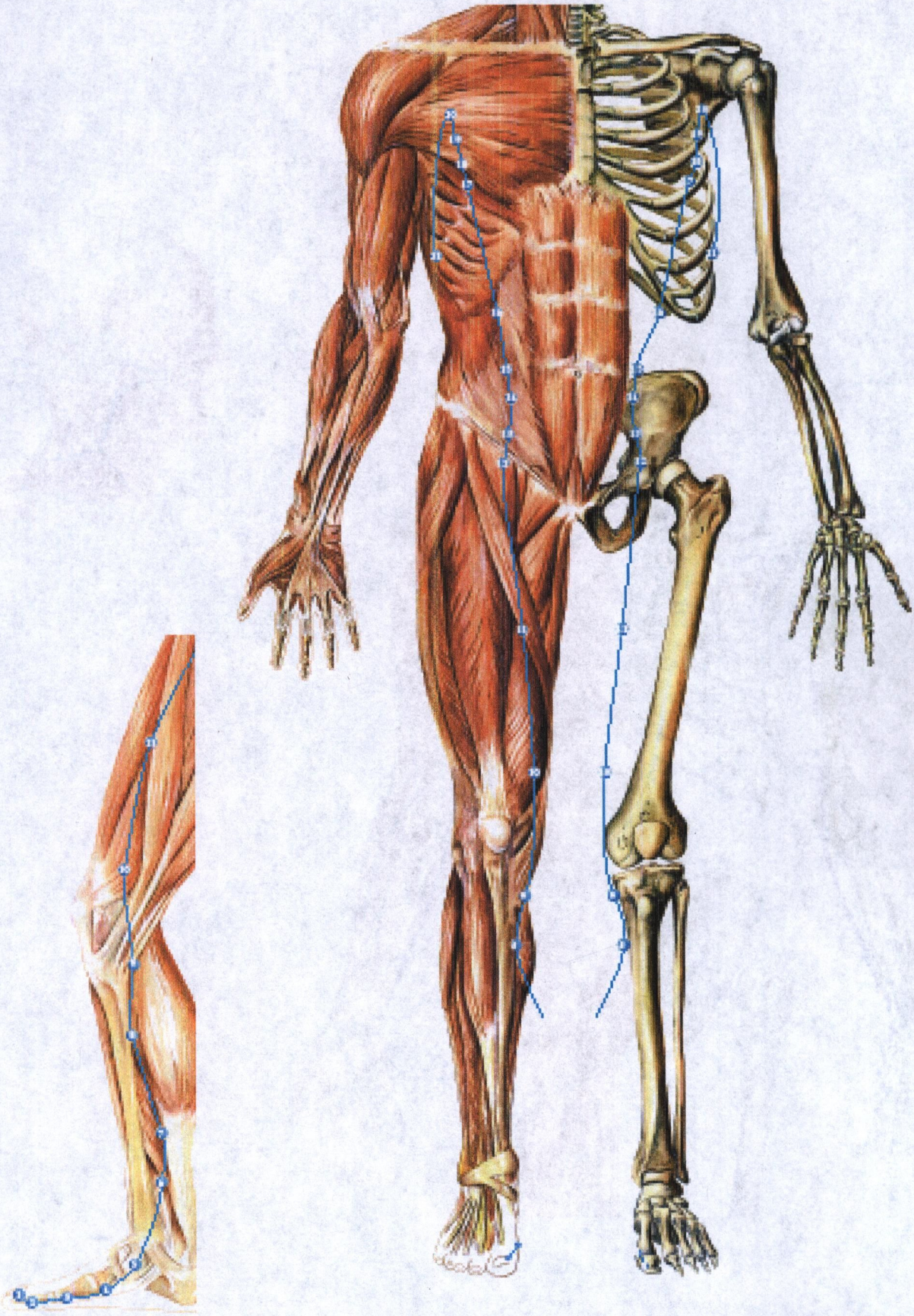
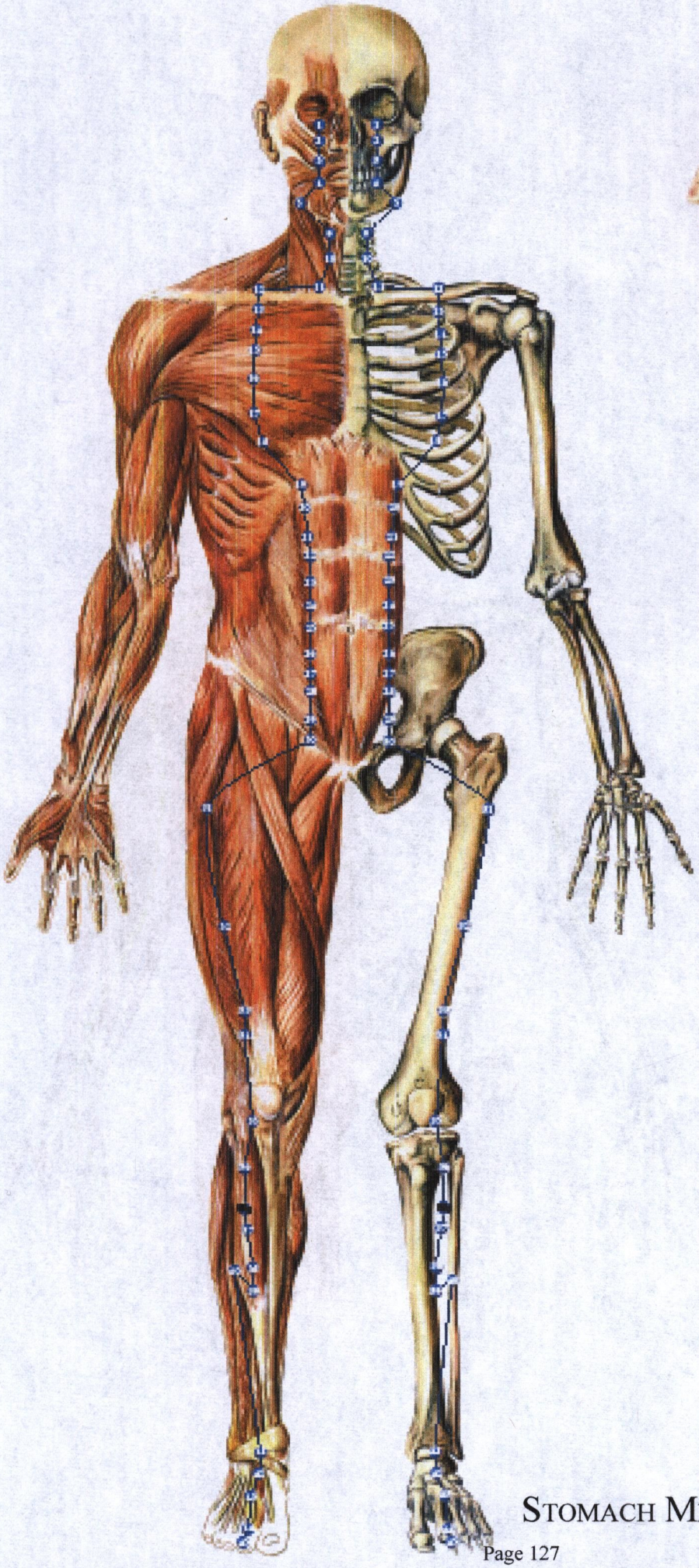
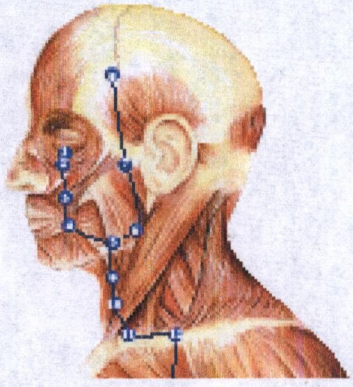
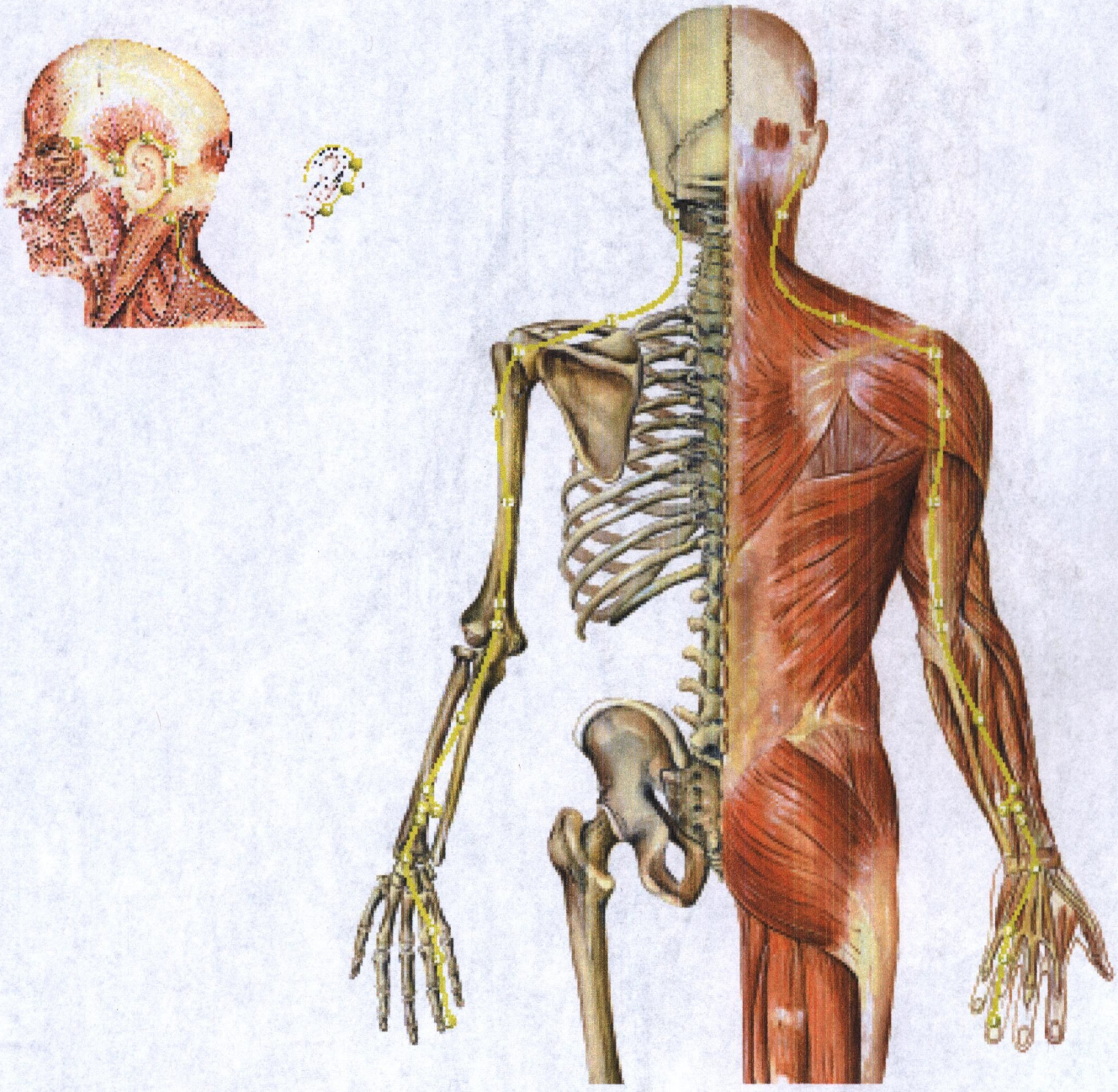


Spleen Meridian





Stomach Meridian



Triple Heater Meridian

GLOSSARY of ABBREVIATIONS

Ant	Anterior
ASIS	Anterior superior iliac spine of ilium
BL	Bilateral
Contralateral	Pertains to opposite side of the body (R or L) from reference
CN	Cranial Nerve
EAC	External Auditory Canal
EOP	External occipital protuberance
I.C.S.	Intercostal space
Ipsilateral	Pertains to same side of the body (R or L) as reference
L	Left or Lumbar
Lat	Lateral
L.B.	Lovett Brother
M.A.P.	Muscle acupuncture point
Midline	Midline of the body or organ
M.M.	Myomere, direct nerve supply to muscle
M.T.P.	Muscle Testing position
Post	Posterior
PSIS	Posterior superior iliac spine of ilium
Sup	Superior
R	Right
SCM	Sternocleidomastoideous muscle
V.L.	Vertebral Level, A level of the spinal column where the somato-visceral relationships are expressed
VOR	Visceral Organ Reflexes

MERIDIANS

B	Bladder
Cv	Conception Vessel
Cx	Circulation / Sex
G	Gallbladder
H	Heart
K	Kidney
Li	Large Intestine
Lu	Lung
Lv	Liver
P	Pericardium (same as Circulation Meridian)
Si	Small Intestine
Sp	Spleen
St	Stomach
Tw	Triple Warmer
X	Extra (outside of normal Meridians)
Gv	Governing Vessel

NUTRIENT SOURCE

(NW) Nutri West
P.O. Box 950
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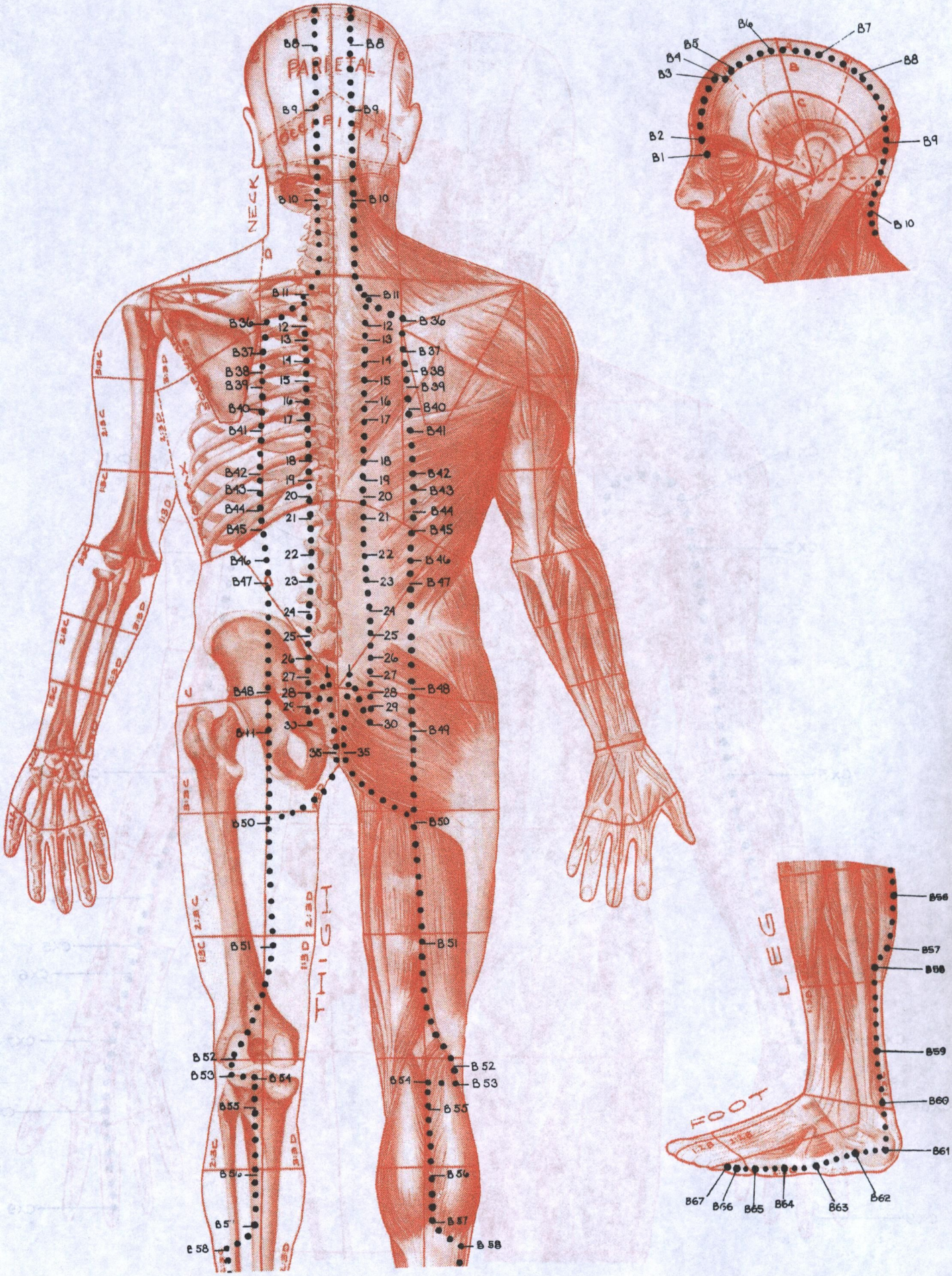
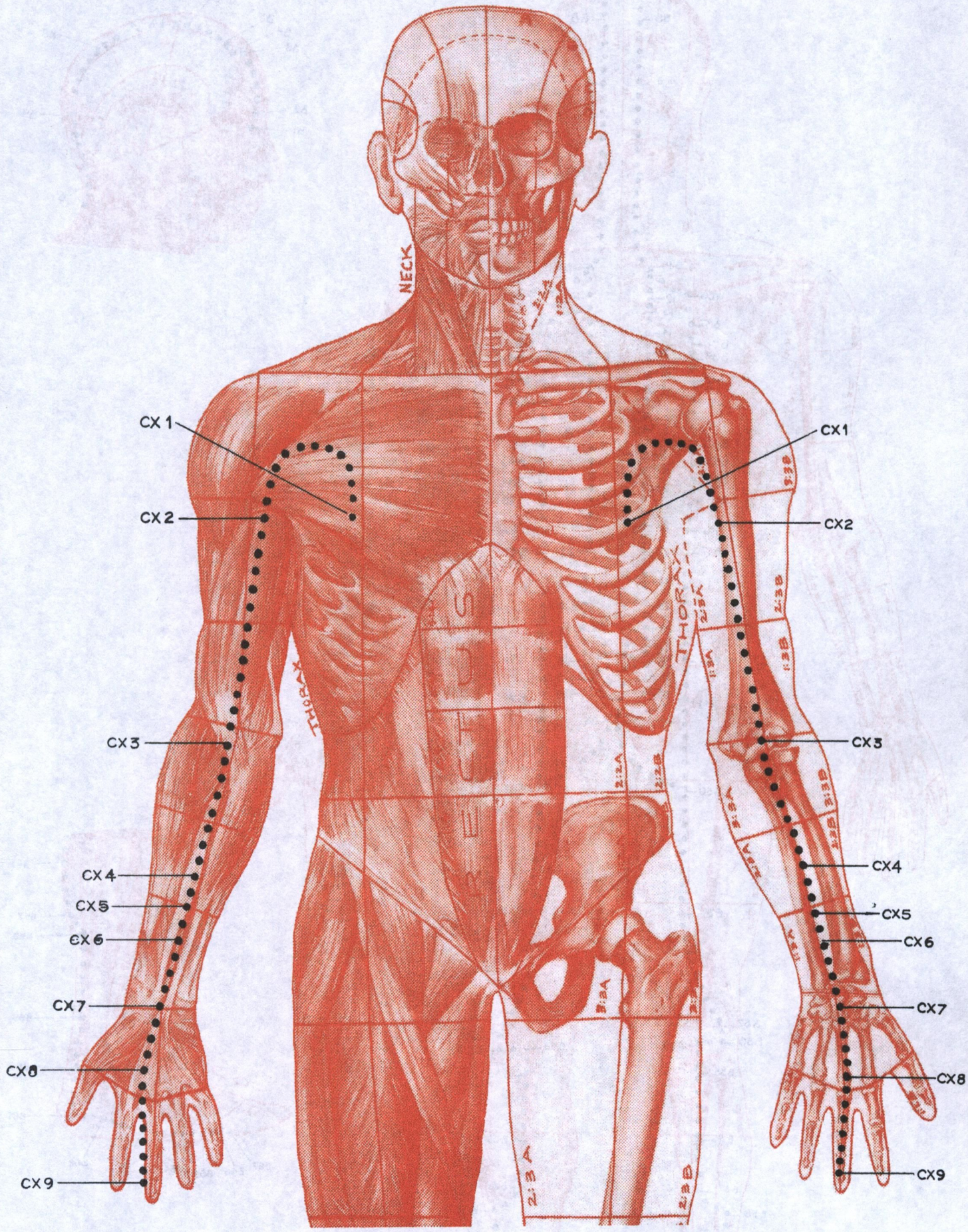
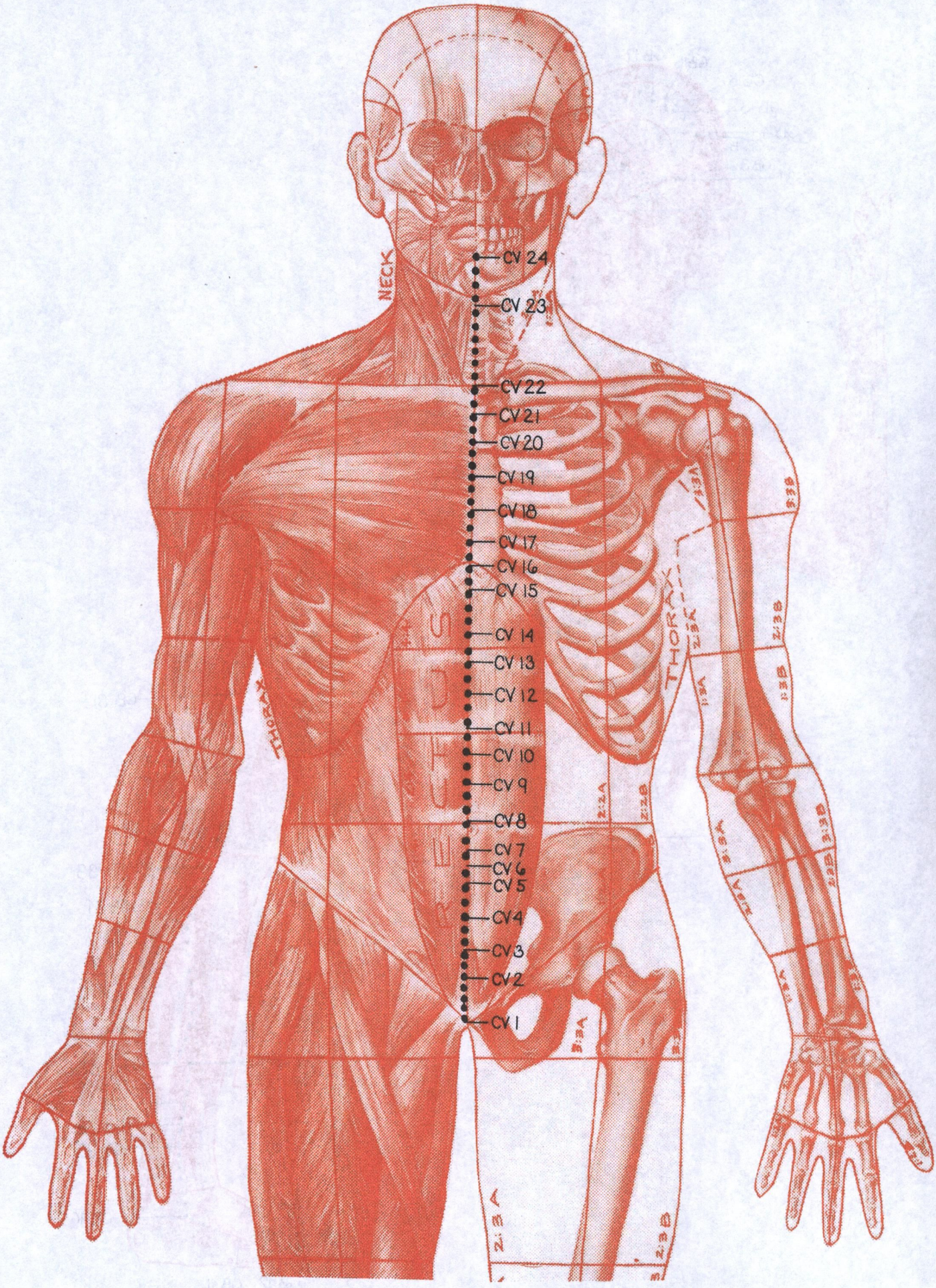
www.nutri-west.com
Phone Number: 1-800-443-3333



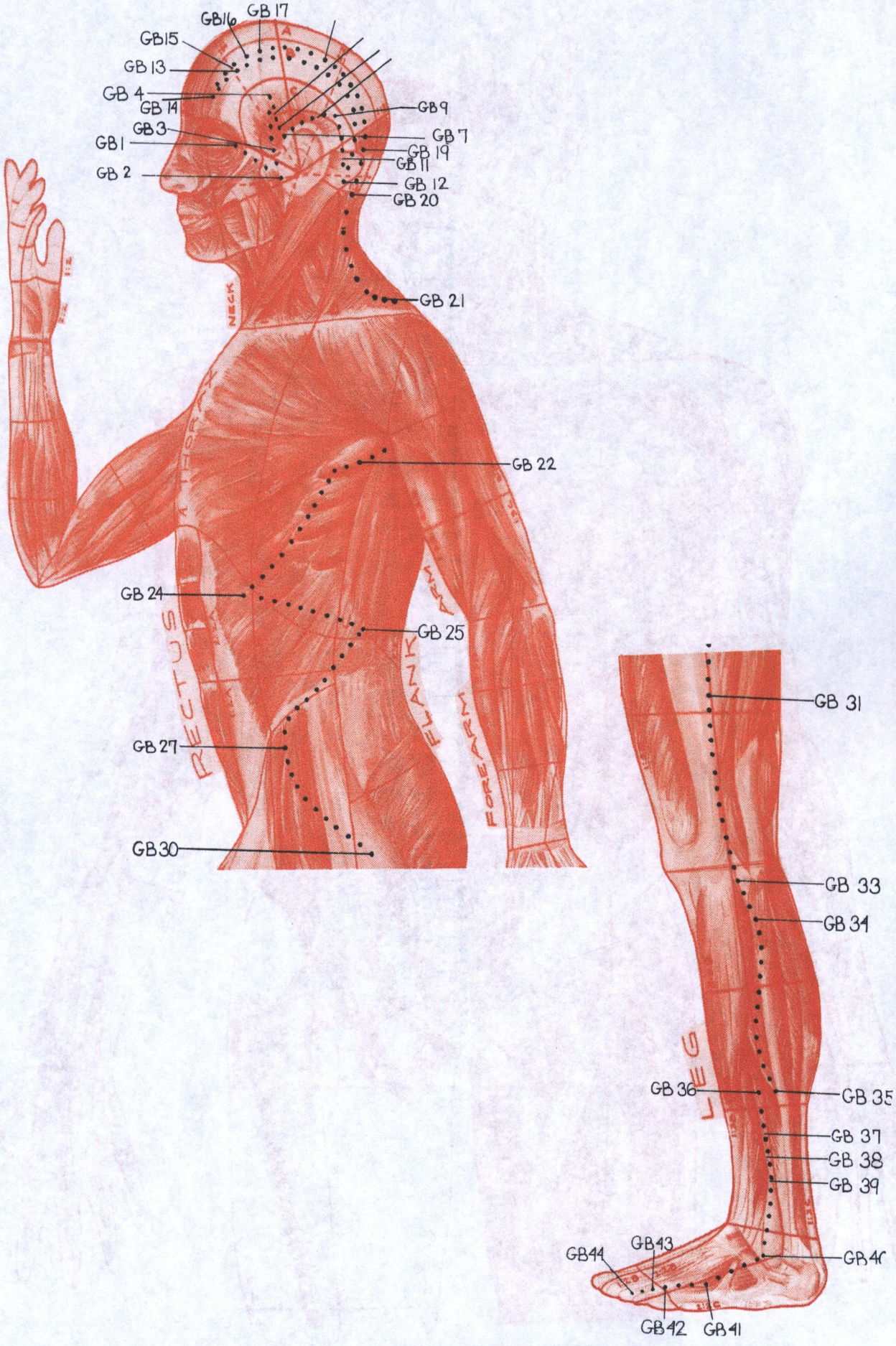
BLADDER MERIDIAN



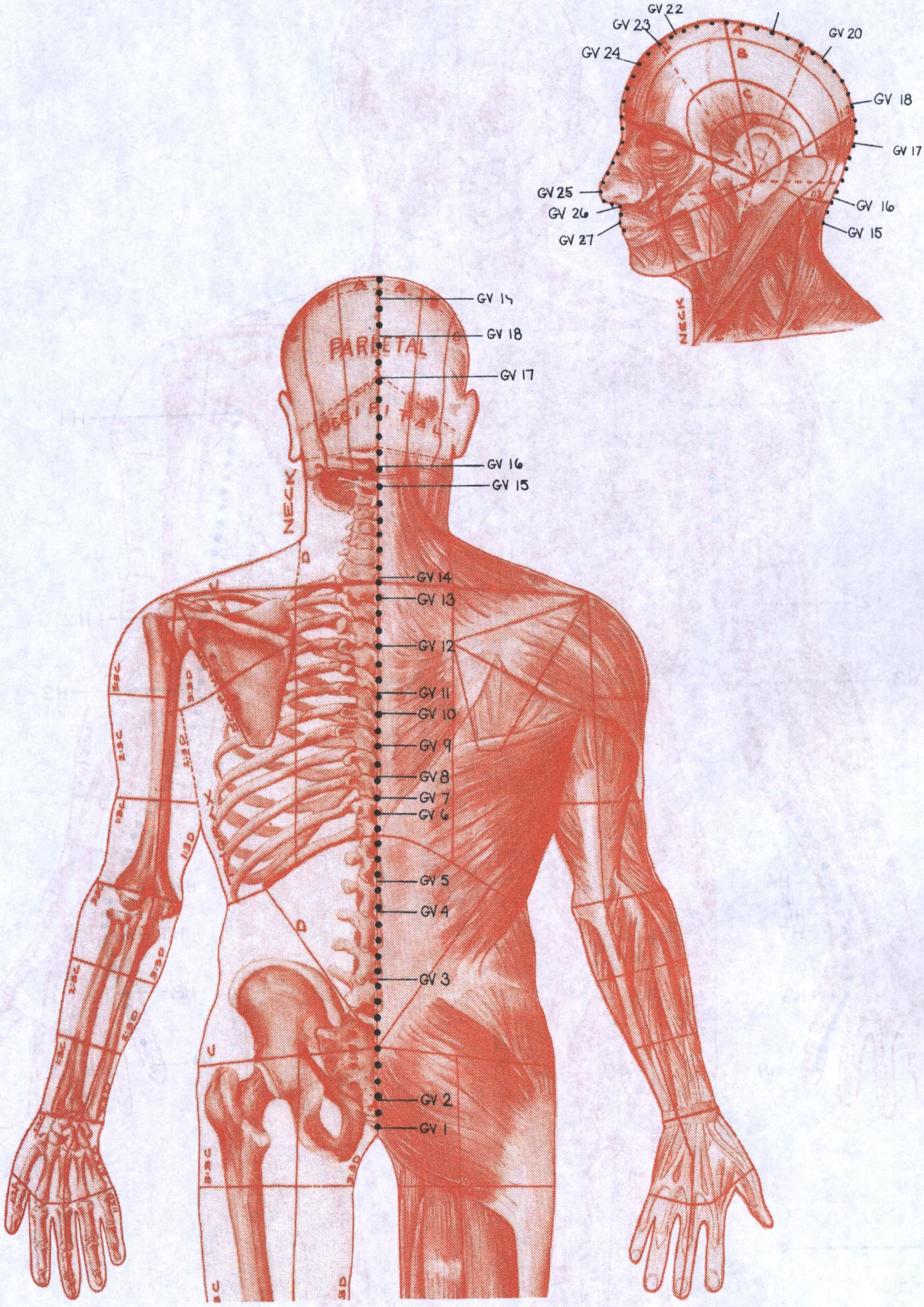
CIRCULATION SEX / PERICARDIUM MERIDIAN



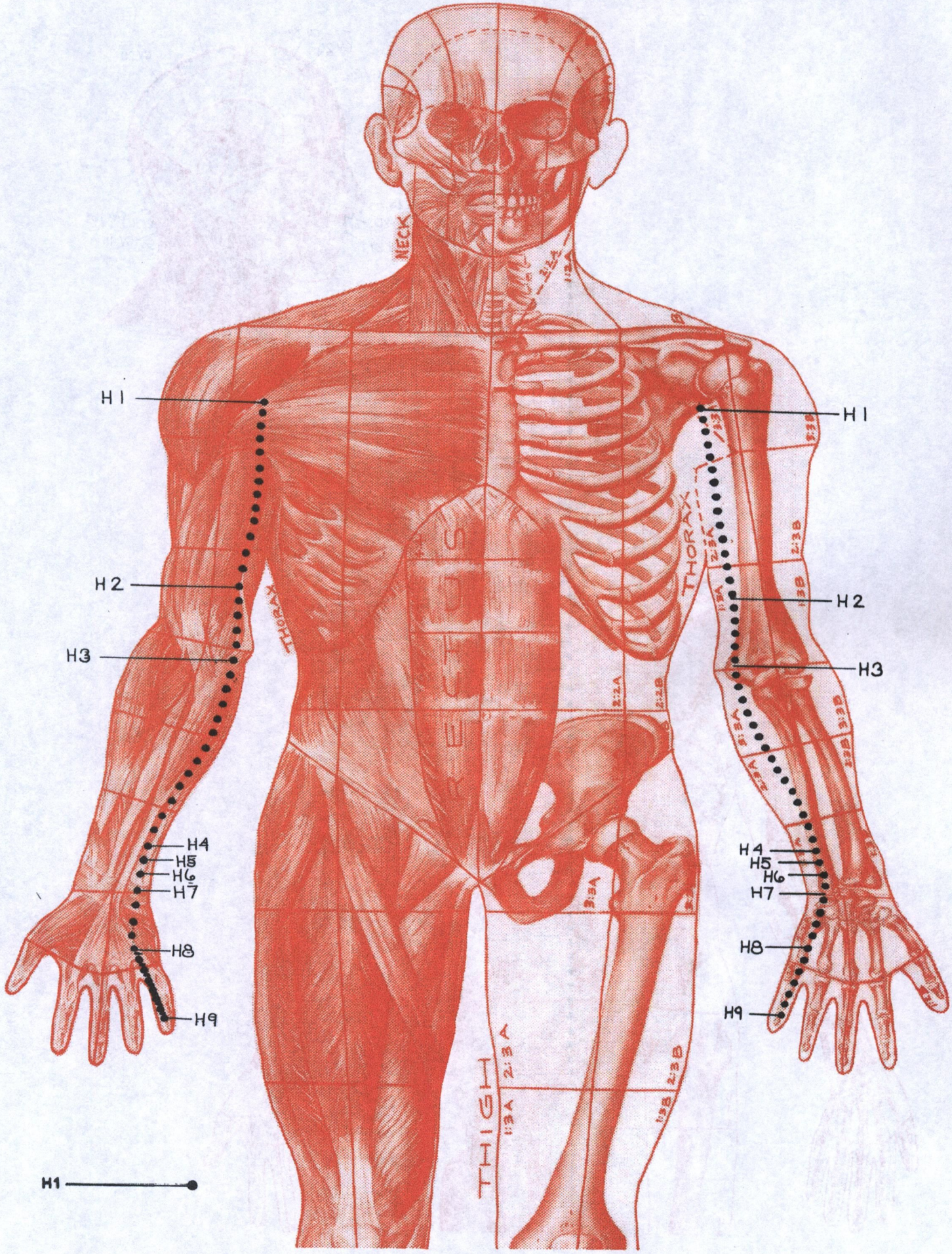
CONCEPTION VESSEL MERIDIAN



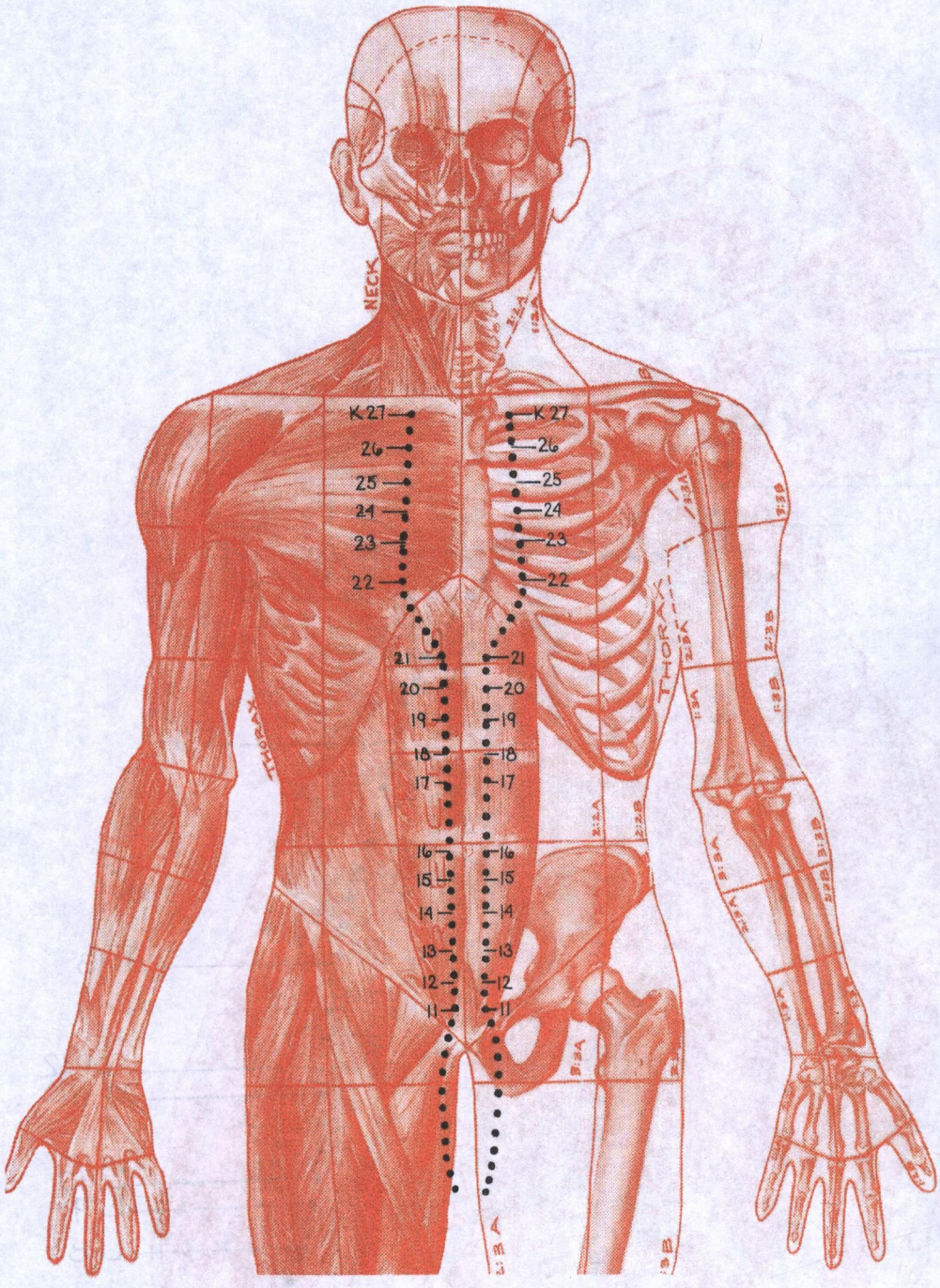
GALL BLADDER MERIDIAN

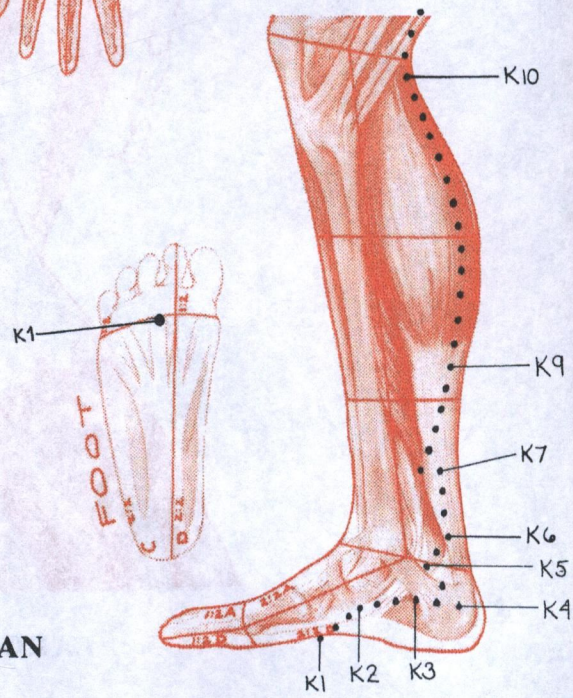


GOVERNING VESSEL MERIDIAN

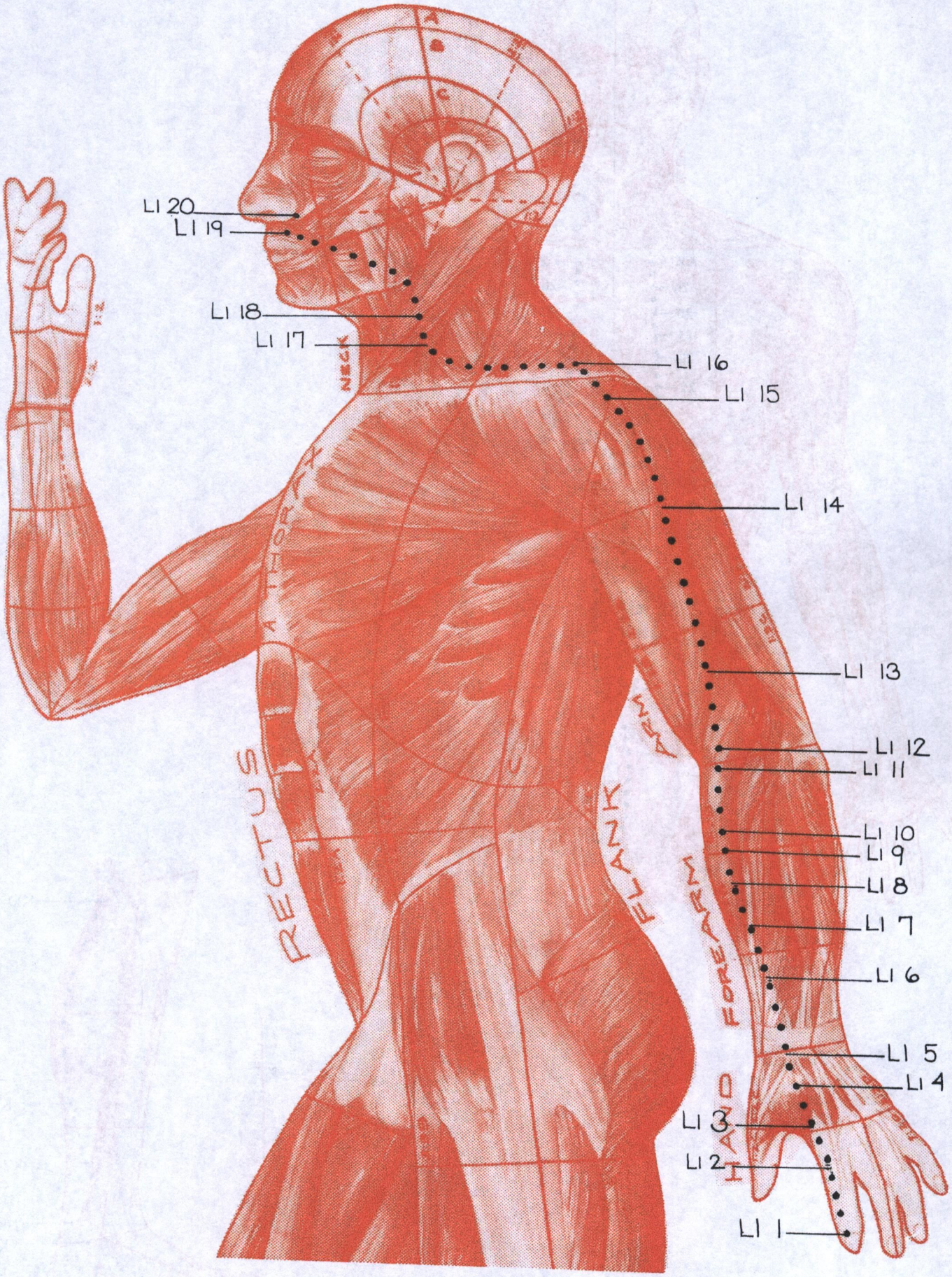


HEART MERIDIAN

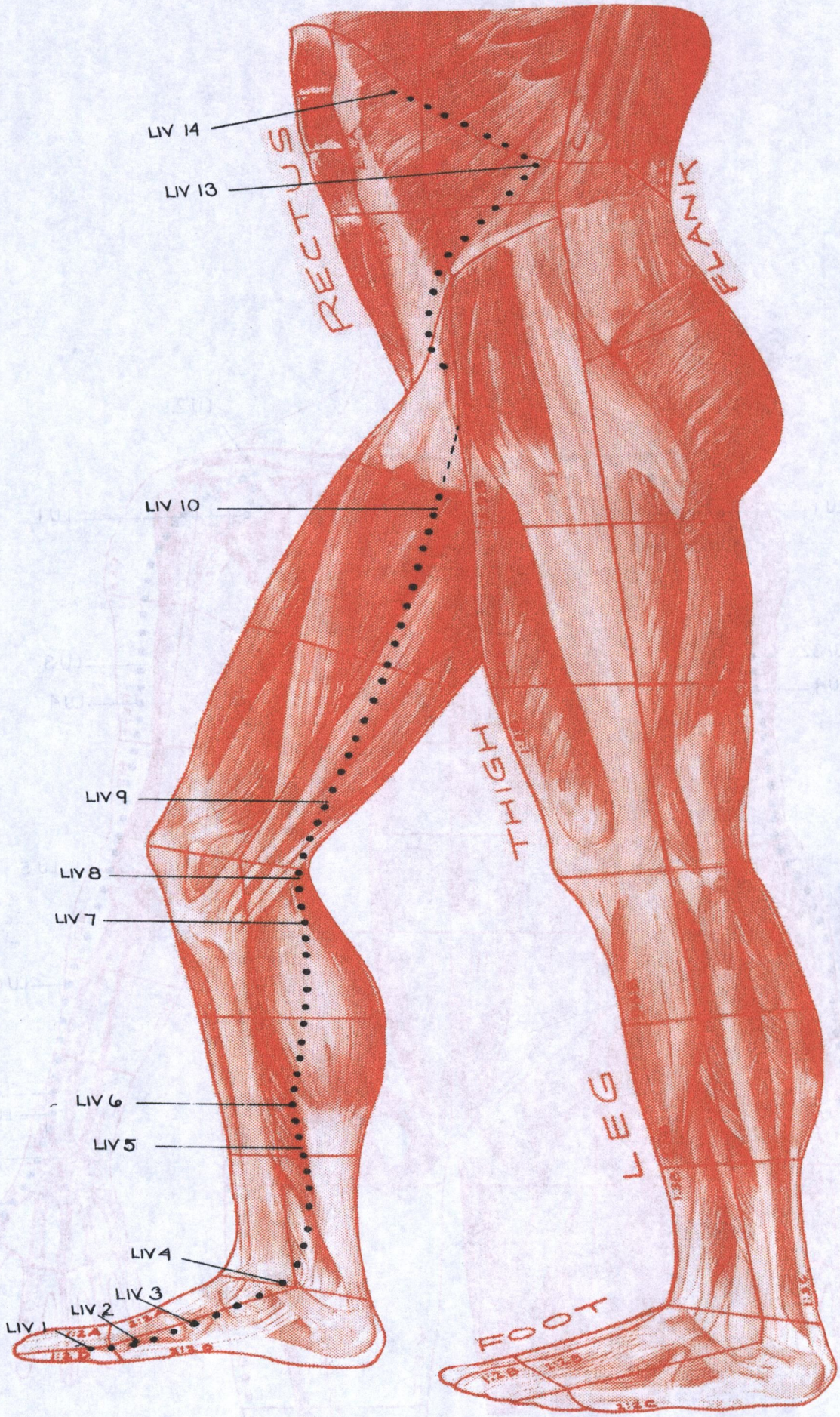




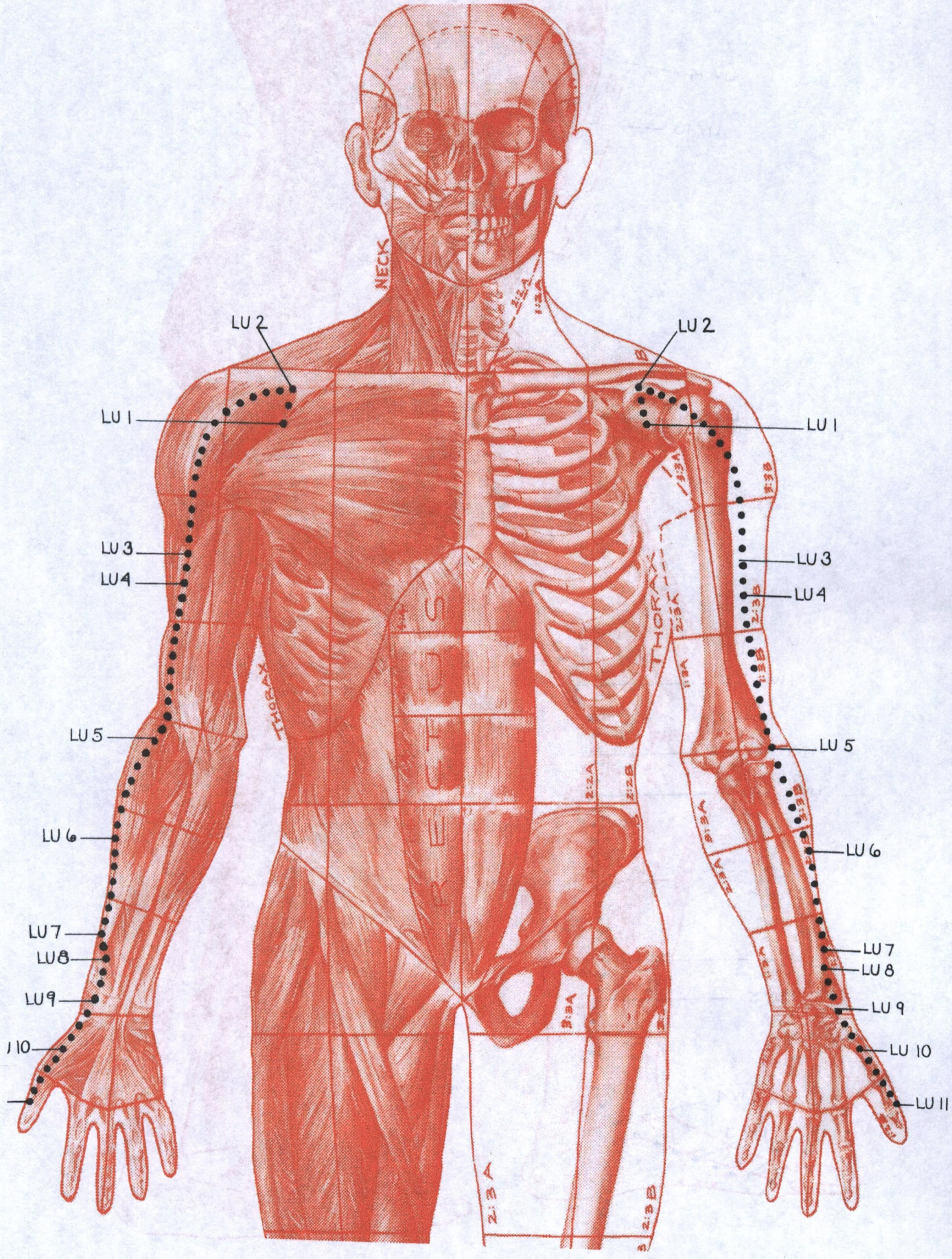
KIDNEY MERIDIAN



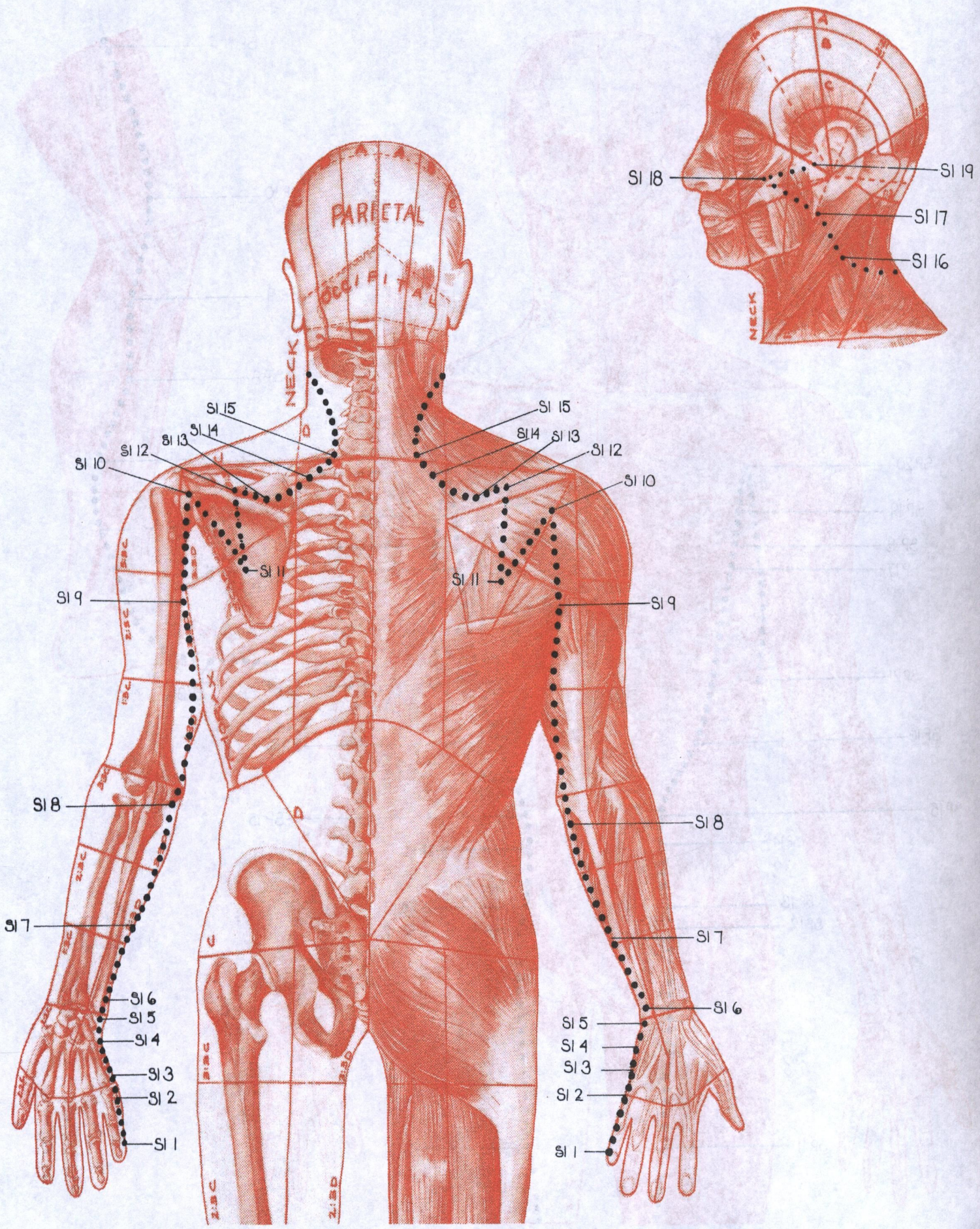
LARGE INTESTINE MERIDIAN



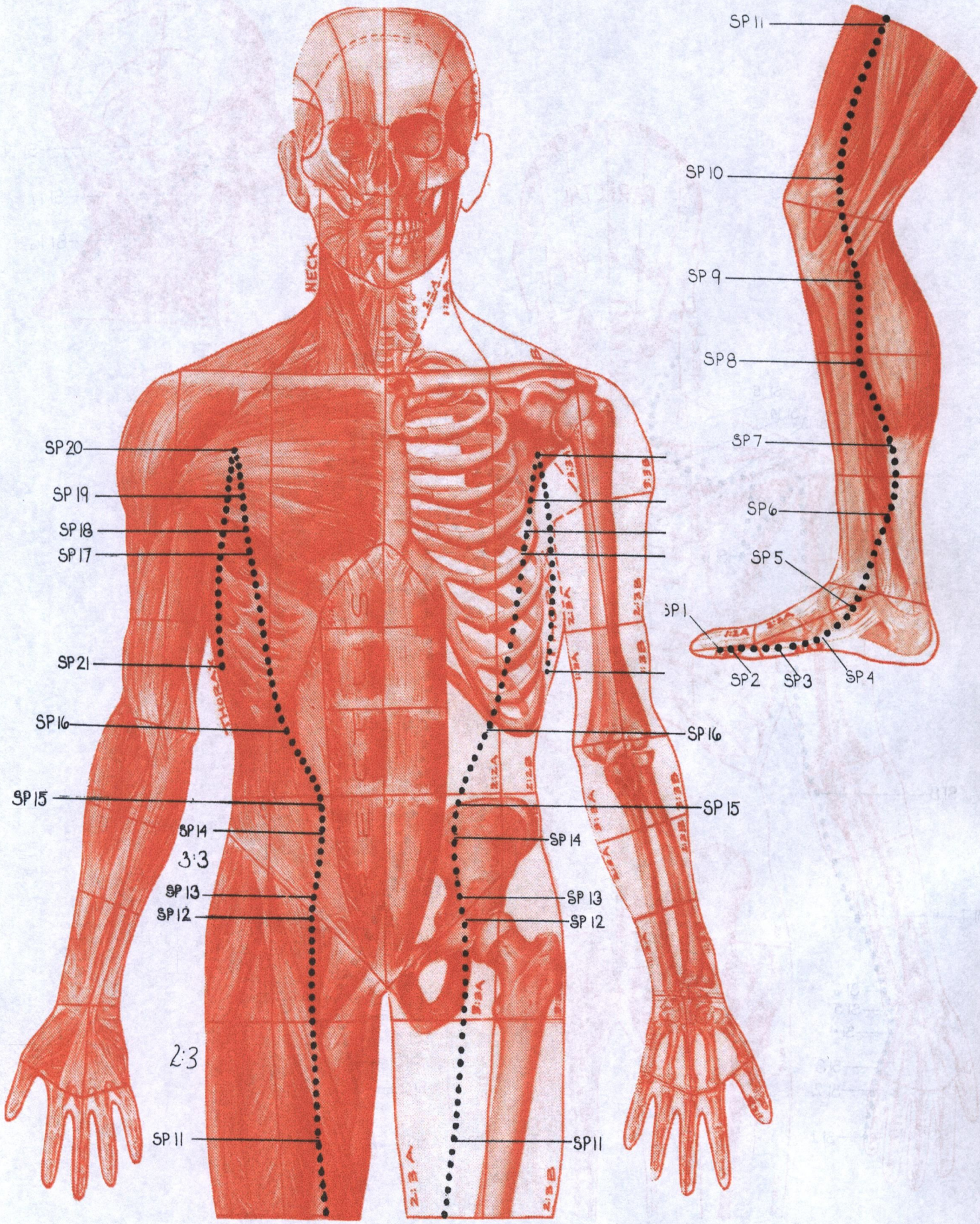
LIVER MERIDIAN



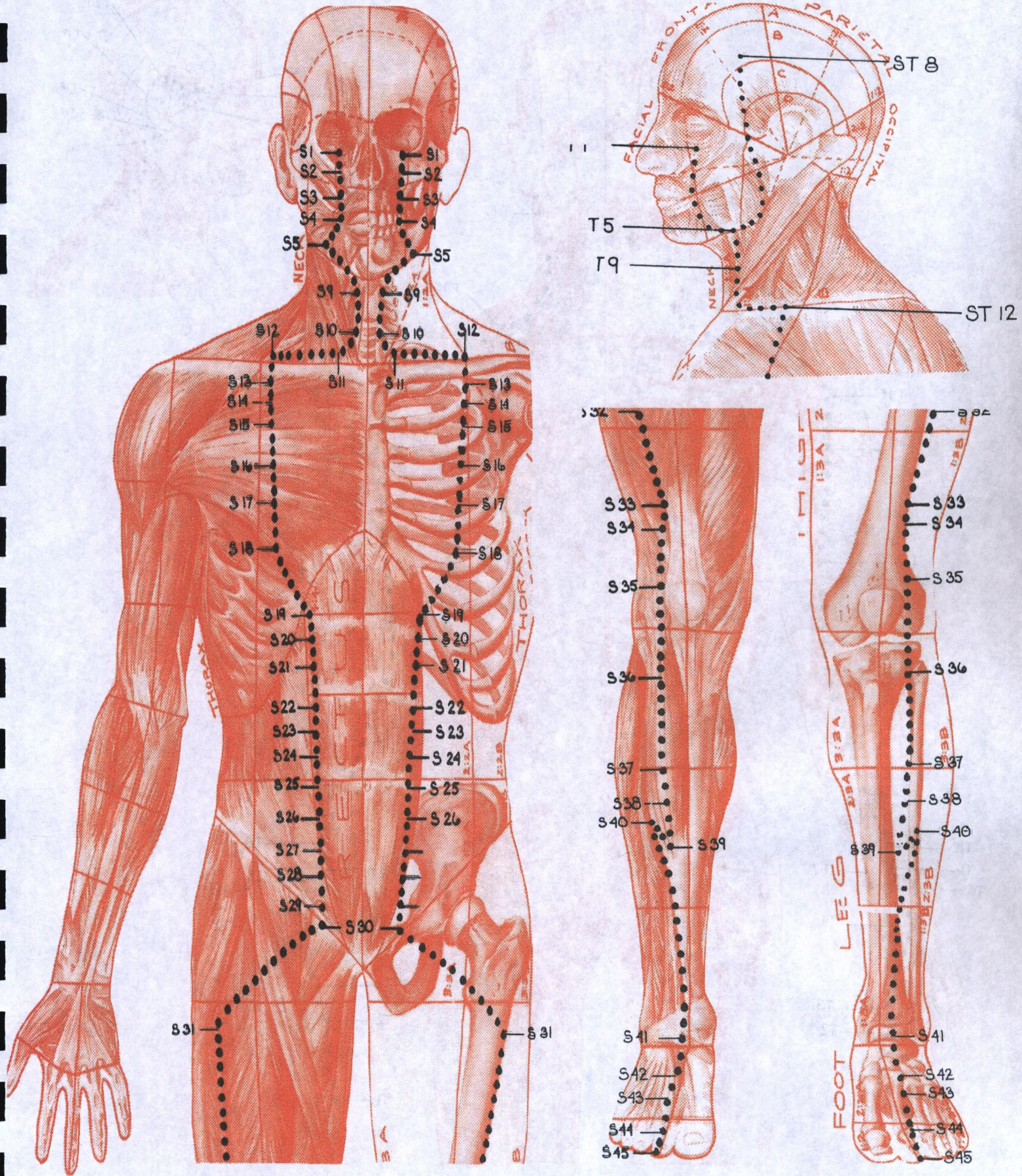
LUNG MERIDIAN



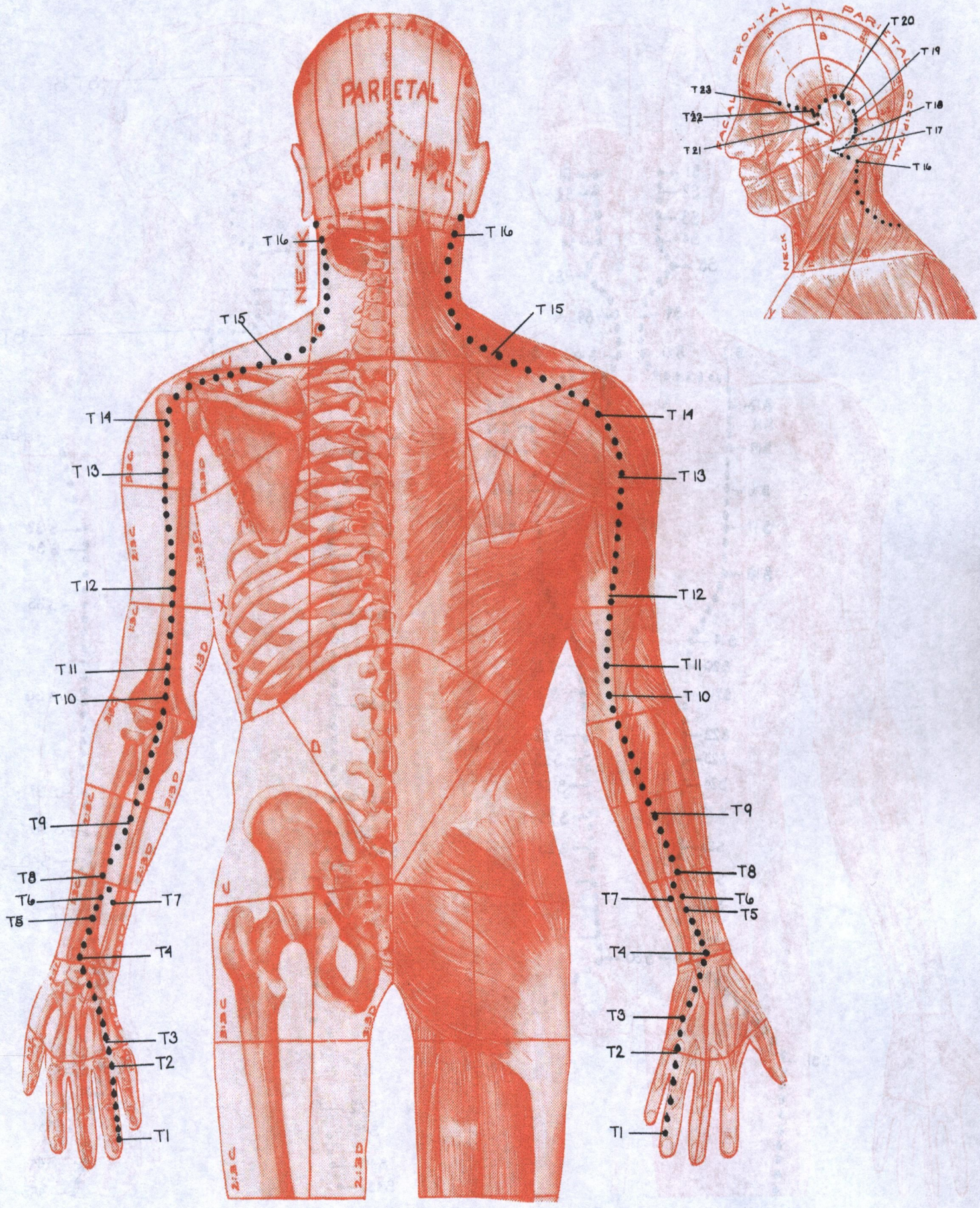
SMALL INTESTINE MERIDIAN



SPLEEN MERIDIAN



STOMACH MERIDIAN



TRIPLE HEATER MERIDIAN

GLOSSARY-ABBREVIATIONS

A.E.C.A. - All essential components available

A.E.C.N.A. - All essential components not available

ANS - Autonomic Nervous System

ASIS - Anterior Superior Iliac Spine of Ilium

Contralateral - pertains to opposite side of body

CPU - Central Processing Unit

GAS (Beardall) - Glandular Adaptive Syndrome

GAS (Selye) - General Adaptive Syndrome

ICAK - International College of Applied Kinesiology

Ipsilateral - pertains to same side of body

LAS (Selye) - Local Adaptive Syndrome

MAP - Muscle Acupuncture Point

MM - Myomere

NL - Neurolymphatic

NRL - Non-respiratory lesion

NV - Neurovascular

PAS (Beardall) - Primary Adaptive Syndrome

PD - Pelvic deficiency

(S) - Standard Process

SAS (Beardall) - Spinal Adaptive Syndrome

T.L. - Therapy Localization

V.L. - Vertebral Level

VOR - Visceral Organ Reflex